

small air forces observer

vol. 15 no. 4 (60)
October 1991

US \$3.00



ROYAL HELLENIC AIR FORCE 1940
DUTCH AIR FORCE 1933-36
TAILS OF THE GOONEY BIRD
AEROSPATIALE GAZELLE
IRISH AIR CORP EMBLEMS

vol. 15 no. 4 (60)

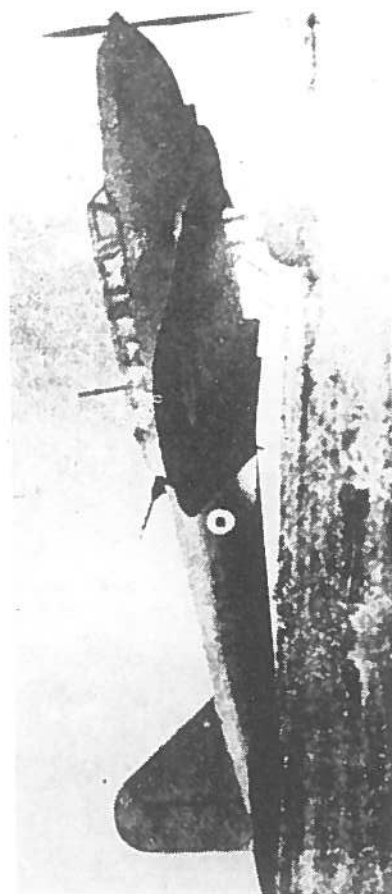
August 1991



a



c



d



b



e

SMALL AIR FORCES OBSERVER

The Newsletter of the Small Air Forces Clearing House

CONTENTS

Abstracts	106
Wants & Disposals	107
Magazines (Fanatyk Plastik)	107
Books (Latin P-47, Triada, Su-27, RAAF)	108
Air War over Greece: Part I (Dildy)	109
Accessories (MiG-21 brass, wheels, lights)	119
RHAF 1940 (Korobilis)	120
Dutch Aviation: 1933-1936 (Gerdessen)	126
Letters (Mills, Frans, Ledet, Hotte, Young, Flores, Adams)	127
Kits (Ar-68, FW Triebflugel, P-40B/C, I-16, Po-2, Spitfire IX UTI)	129
Gazelle Research Project (Devins & Cance)	130
Tales of the Gooney-Bird (Koppel)	131
Irish Air Corp Insignia (Sullivan)	134

SAFO EDITORIAL POLICY: The purpose of the SAFCH is to "promote interest in the history and modeling of the aircraft of the smaller countries". In support of this goal, the SAFCH encourages international cooperation in researching the history of aviation on all aspects of aviation, both military and civil, from all periods of time, and for all the smaller countries. In return for this support, members are asked to submit occasional progress reports for publication in the SAFO. While the final results should appear in the most prestigious publication possible, it is requested that the SAFCH be mentioned (with address) in the article and that SAFO be afforded the opportunity of reprinting the material.

SUBSCRIPTION RATE: Subscription to the current volume of the SAFO is US \$9.00 for 4 issues per year in the USA and \$10.00 elsewhere via surface mail. For air mail delivery, add \$8.00 for Europe and Latin America or \$11.00 for Asia, African, and Australia. Payment should be made in cash, by International Money Order, or by a check from a bank with a subsidiary in the US. (There's a \$25 charge to cash a check from a bank without a US subsidiary.) New subscriptions begin with all issues of the volume current at the time payment is received; if you desire otherwise, please specify with your payment which issues are desired. Send remittance to Jim Sanders, 27965 Berwick Dr., Carmel, CA 93923 USA. You can also have your bank transfer money directly to my bank: Coast Federal, Los Angeles, 3220-7021-3; credit to James V. Sanders, Account #03105350.

BACK ISSUES: Either Back issues or Xerox copies of out-of-print issues are available for all issues of the SAFO published. For a list of back issues and their costs, see the "SAFCH Sales Service" sheet in this issue. For a list of all issues and their content, send two 1st class stamps (or 2 IRCs) to the editorial office.

SPONSORSHIP PROGRAM: To keep the SAFCH truly international, our Sponsorship Program allows persons who can not obtain US currency to receive the SAFO. Any SAFCH member interested in sponsoring a SAFO subscription for a person in Eastern Europe (or other country where it is impossible or difficult to obtain US currency) should write to the editorial office for a

list of persons seeking sponsors. If you would like to receive the SAFO but can not obtain US currency, a list of SAFCH members looking for someone to sponsor is also available from the editorial office.

SAFO is distributed in England by Midland Counties Publications, 24 The Hollow, Earl Shilton, Leicester LE9 7NA; and in the USA by Bill Dean Books, 166-41 Powells Cove Blvd., Whitestone, NY 11357. Additional distributors in both of these countries and in other countries would be most welcome.

SMALL AIR FORCES OBSERVER (USPS 439-450) is published quarterly for \$9.00 per year by the Small Air Forces Clearing House, 27965 Berwick Dr., Carmel, CA 93923. Second class postage paid at Carmel Valley, CA 93924. **POSTMASTER:** send address changes to Small Air Forces Clearing House 27965 Berwick Dr., Carmel, CA 93923.

COPYRIGHT: Copyright © 1991 by Small Air Forces Clearing House. All rights reserved. The content of this publication cannot be reproduced in whole or in part without the written consent of the publisher and the author.

LOST MEMBERS: Anyone knowing the whereabouts of the following 'lost' SAFCH members please inform the editorial office (last known address included): Bruno Dauzie, 1 rue des M. de Chateaubriand, 94490 Ormesson, France. Alain La Pierre, PO Box 2102 2102A, Les Delicias, Maracay, Venezuela. Michael Parr, #124 101 Tabor Blvd., Prince George, B.C. Canada V2M 6Y1. Ron V. Ferreyra, PO Box 1612, Chula Vista, CA., Richard Harrison, "Halcyon", RD 3, Box 3639A. Stroudsburg, PA.

SAFCH/MAI KIT: Plans for the SAFCH 1/72-scale kit of the Fokker C.VD/E are going smoothly; the master model is under construction by one of our members and another has agreed to do the scale drawings for the instruction sheet and box art. There is still a lot more to be decided. How many and which variants will be included in a single kit has yet to be worked out. (I am still lacking drawings for the inline-engine version. Can anyone help?) More importantly, the person who will be doing the injection molding has not been "signed on the dotted line", although MAI will soon be testing his reliability with their next kit.

Whether to include decals with the kit and/or make them independently available has not yet been decided, nor has the subjects of any decals been chosen. I would like to involve all SAFCH member in these decisions in two ways:

(1) **DECAL SURVEY:** I invite each and every SAFO readers to send me a post card (or letter) listing the countries whose markings you would like to see available with the kit.

(2) **KIT CONTEST:** If you have a favorite Fokker C.VD/E color scheme you would like to see included on the decal sheet, send a photo or drawing of this scheme to me along with mention of the source of the scheme. I'll publish any original drawings in SAFO and will award a free C.V kit to the member submitting the most unusual (authenticated) scheme.

The last date for the receipt of the above informa-

tion is 1 January 1992.

RENEWAL TIME: Another year is coming to an end and it is time to renew your subscription for 1992. The subscription rate remains unchanged so SAFO will still provide you with the most information for your hard-earned dollar. Please return the enclosed renewal form (or a copy of the form below) immediately. If you have aviation friends overseas, please consider sponsoring a SAFO subscription for them.

COVER COMMENTS: Our commemoration of the 50th anniversary of the activities of the small air forces in WWII continues in this issue with the story of the Royal Hellenic Air Force's fight against Axis invaders. The cover photo shows a RHAF PZL P-24, "delta"-116, shortly after delivery but before being camouflaged. Roundels are carried on the upper and lower wing surfaces. Wheel fairing were later removed. (via IPMS-Greece)

SMALL AIR FORCES OBSERVER
27965 Berwick Dr., Carmel, CA 93923

1. Subscription to Volume 16 (\$9.00 USA; \$10.00 surface mail elsewhere; air mail \$15.25 to Latin America, \$17.25 to Europe, \$19.25 to Asia/Africa, \$19.75 to Pacific Rim)

2. Donation to help meet editorial and sponsorship costs.

3. Amount enclosed (add lines 3 & 4).
Make checks payable to SAFCH/Jim Sanders

To prevent interruption of service, please return by 1 January 1992.

AUSTRALIA

AUSTRALIAN PLASTIC MODELLER'S ASSOCIATION (APMA, PO Box 51, Strathfield, NSW 2135; 4 issues sea mail A\$27; air mail A\$30). 1/91 (24 pages) "New Colours: A Hornet Update" 4 pages including 2 photos and side-view drawing of RAAF machine. "Argentinian Iroquois" one page with side-view drawing of AE-413 in ambulance markings. "Iberian Air War: Modelling Aircraft of the Spanish Civil War" 11 pages including 8 side-view drawings (Cr-32, He-51B, D-510, S-231, SB-2, DH-60IIIA, DH-89M & He-115A-0) and 3 tables (Republican serials, Nationalist serials, 1/72-scale kits). "Me-110 Nightfighters: Colours and Modelling" 2 pages including 2 side-view drawings and drawings of antennae. "Belligerent Bizjets" 2 pages including 3 side-view drawings of Argentine Learjets.

AUSTRIA

OFH NACHRICHTEN (Oesterrichische Flugzug Historiker, Pfenninggeldgasse 18/214, A-1160, Wien).

2/91 (32 pages) "Saab 350E Draken" 6 pages including 3 photos, a 2-page 3-view drawing, and a table serial numbers. "KUK Dreidecker" 5 pages including one photo and 4 side-view drawings. (MAG Fokker Dr-I, Lohner Type A, Aviatik Berg Dr, & WKf Dr DType). "Lampich NL XXII/36" 2 pages including one photo and 1/72-scale 3-view drawings for this neat-looking 2-seat trainer.

CANADA

RANDOM THOUGHTS (IPMS Canada, Box 626, Stn. B, Ottawa, Ontario K1P 5R7; 6 issues for US \$16.00 in US \$18.00 elsewhere).

21/4 (24 pages) Nothing of small-air-force interest, but a couple of thought-provoking modeling articles: "Modelling a Late Model Dora" 5 pages on vacuform modeling the Falcon kit. "Pastel Pigments" 2 pages on "painting" your model with pastels. You've got to read it to believe it. "Technical Pens: More than just Drawing" 2 pages on using technical pens in your modeling.

DENMARK

NYT (IPMS Denmark, c/o Bjorn Jensen, Rosenvaegets Alle 6, 2100 Kobenhavn 0; 4 issues for 90 Dkr surface, 100 Dkr airmail).

#52 (30 pages) "BAe Sea Skua" one page with drawings and color information. "Tidlige Yak-Jagere" 4 pages including 3 pages of 1/72-scale drawings of Yak-1/1M/3 with drawings of cockpit and other details. "Cierva C.30 Molleplanet" 5 pages including 1/72-scale drawings of Danish "M-1".

ENGLAND

IPMS MAGAZINE (Neil Robertson, 'The Prince of Wales', Sheffield Road, Hoyland Common, Nr. Barnsley, S74 0DQ, 6 issues for £12.00. US subscription agent: Wise Owl Publications, 4314 West 238th St., Torrance, CA 90505; \$22.00)

3/91 (24 pages) "BAe Hawk 100 and 200" 2 pages on building the Matchbox and Airfix kits using the Scalecraft conversion set. "The Do-24" 5 pages including 1/72-scale drawings. "Desert Victors" one page including 4 photos of Victor nose art. "Modelling Update 2: Cottage Industry Joins the Gulf (Modelling Accessory) War" 3 pages including 7 photos. "The French Connection" 3 pages

including camouflage schemes for Iraqi Mirage F1s and French Jaguars.

FINLAND

MALLARI (IPMS Finland, PL 798, 00101 Helsinki 10; 6 issues \$20.00, add \$1.00 for airmail and \$1.50 for cashing personal check).

2/91 (16 pages) "Jakovlev Jak-6" 4 pages including 6 photos and a page of 1/72-scale drawings.

GREECE

NEA (IPMS-Greece, PO Box 79167, 175 05 Amfiteia, Athens)

2/91 (32 pages) "Greek Spitfires: Part 2" 3 pages including 6 photos, table of serial numbers, and one side-view drawing (Mk XVI). "Sopwith Batboat & Sopwith Greek Seaplane" 5 pages including 6 photos and two 1/72-scale 3-view drawings. "F-5 Freedom Fighter" 5 pages including 6 side-view drawings of Greek machines. "Greek Aircraft from 1912 to 1922" one page including list of 32 types known to have been used by the Greek Army and Navy. [Author's note: Most surprising entry: Sopwith Triplane.]

ITALY

IL NOTIZIARIO (IPMS Italy, CP 182, 41100 Modena Ferrovia; 4 issues 24,000 Italian Lira in Europe or \$18.00 overseas).

1/90 (32 pages) "Polski MiG-29" one page including one photo and sketch of unit insignia. "AMI Starfighter in Technicolor" 4 pages of drawings of two colorful Italian F-104s.

JP-4 (JP-4, CP 1550, 50100 Firenze; L 27.000 Europe, L 30.000 elsewhere).

6/91 (98 pages) "Aeronautica Argentina" 13 pages including 25 color photos (Skyhawk, T-34, MS-760, IA-63, Pucara, Dagger, Mirage III, S-61, F-27, Super Etendard, Electra, S-2, MB-326, C212, Puma, & MB-339). "Verso una Securite Civile Italiana" 9 pages including 7 color photos (CL-215, G-222, CH-47, C-130, & S2).

7/91 (98 pages) "Il Vecchio Crouze" 4 pages including 5 color photos of french F-8E(FN). "Dragon Hammer 91" 2 pages including 6 color photos (Turkish & Greek F-4s and Portuguese G-91). "Un Congedo Storico" 2 pages including 6 color photos of ex-East German aircraft in Luftwaffe markings (MiG-23, MiG-21, Mi-24, MiG-29, & Mi-14).

POLAND

AERO TECHNIKA LOTNICZA (Hobby Centrum, Szekspira 4/248, 01-913 Warszawa. 12 issues US \$32.00.)

2/91 (44 pages) "Macchi C-202" 15 pages including 13 photos, 2-page cutaway drawing, 2 pages of 1/72-scale drawings, 2 pages of drawings of details, and 5 color side-view drawings. "Svenska Flyvapnet" 4 pages including 4 photos, 2 tables, and 6 color side-view drawings. "IAR-99 Soim" 2 pages including 2 photos and 3-view drawing. "AH-64 Apache" 2 pages with 15 photos. "Samoloty w Szkole Orlat w Deblinie" 3 pages with 14 photos of aircraft destroyed at Deblin in September 1939. "Afera Languedocow" 3 pages including 3-view drawing of SE-161 Languedoc.

3/91 (44 pages) "RWD-8" 17 pages including 18 photos, 3 pages of 1/72-scale drawings, 4 pages of 1/48-scale drawings, one page of side-view drawings, and 5 color side-view drawings. "YF-22A" 2 pages including 4 photos and a 3-view drawing. "Mi-14PL" one page with 7 photos. "Canadian

Armed Force Air Command" 4 pages including 2 photos, 4 tables, and 6 color side-view drawings. "Grumman Martlet w Wielkiej Brytanii" 5 pages including 4 photos, table, and 7 side-view drawings. "Stahlwerk Mark MS-IIb Aviat" one page with one photo and 3-view drawing.

4/91 (44 pages) "Harrier" 19 pages including 5 color photos, 9 b&w photos, a 2-page cutaway drawing, 6 pages of 1/72-scale drawings, and drawings of instrument panels. "Wojna w Zatoce Perskiej" 4 pages including list of units and aircraft used by all combatants in the Gulf War and 8 color side-view drawings (Iraqi Su-25, MiG-29, Mirage F1; French Jaguar; RAF Tornado; USAF F-117A; Saudi Arabian Tornado; & Kuwaiti A-4). "Samoloty na Lotniskach Radom-Sadkow i Krakow-Radowice" 2 pages with 10 photos of aircraft destroyed at Radom and Karkow in September 1939. "Skad sie Wziela Szachownica" 2 pages including Albatros D-III, Hansa-Brandenburg D-I, and Fokker D-VIII with early use of the Polish chessboard insignia. "Spad S-51 Kabina Pilota" one-page drawing of S-51 cockpit.

ROMANIA

MODELISM INTERNATIONAL, CP 33-126, Bucharest, ROMANIA (6 issues for US \$24 in any convertible currency).

2/91 (48 pages) "Hansa-Brandenburg C-I" 7 pages including 5 photos and 4 pages of scale drawings and color side-view drawing of Romanian HB C-I.

SOUTH AFRICA

GOLDEN JAW (IPMS Johannesburg, PO Box 84606, Greenside 2034; subscriptions on application.)

#5 (28 pages) Report of the South African 1990 National Model Contest. Nothing of small-air-force interest, but a great editorial about why we model, why enter contests, and how contests should be judged. The author makes the most sense on this subject that I've read in a long time. I'll send a copy of this 5-page article to anyone sending a legal-size SASE (or 2 IRCs).

#6 (24 pages) "Atlas Cheetah" 3 pages on modeling the Cheetah by including one color photo, 2 b&w photos, and a 1/72-scale 3-view drawing. "Unusual Spitfire PR IV Colour Scheme" 2 pages including 2 photos of and PRU blue and white aircraft. "SAAF Mirage F1AZ" 4 pages including 5 photos and 2 pages of drawings of aircraft '236'.

SWITZERLAND

VIRUS PLASTICUS (IPMS-Switzerland, c/o Mathias Weichelt, Zeltstrass 27, 3027 Bern; 4 issues 35 SFr)

2/91 NEWSLETTER (15 pages) This "newsletter" contains information only of interest to IPMS-Schweiz members. I don't know what has happened to VIRUS PLASTICUS.

USA

WWI AERO (15 Crescent Rd., Poughkeepsie, NY 12601; 4 issues \$ 25.00 USA or \$30 overseas).

#133 (122 pages) "The First Burgess Dunne" 11 pages including 17 photos and three 3-view drawings. "Grigorovich" 17 pages including 32 photos, 4 side-view drawings, 2-page scale drawing of M-5, and scale drawings of M-9. "Orenco Airplanes" 11 pages including 7 photos, 8 small 3-view drawings, scale drawings of Orenco D and Orenco F. "Museum der Schweizerische Fliegertruppe" with

11 photos (DH-1, HD-1, DH-5, Nieuport 28, Fokker C.V.E. & Fokker D.VII). "Sopwith Baby Seaplane" 4 pages of scale drawings. SKYWAYS (15 Crescent Rd., Poughkeepsie, NY 12601; 4 issues \$25.00 USA or \$30.00 overseas.). #19 (84 pages) "Bugatti Model 100" 14 pages including 11 photos and scale drawings. "Douglas O-2

Series" 12 pages including 16 photos. "Monocoupe" 4 pages with 14 photos. "Early Boeing Pursuits & Fighters" 10 pages with 20 photos. "Aircraft of Michel Wibault" 15 pages including 11 photos and 9 scale 3-view drawings.

PACIFIC MODELEER (USA \$7.00, others \$8.00 from IPMS-Hawaii, PO Box 1941, Pearl City, HI. #32 (24 pages) "The 100 Hour War" Entire issue devoted to a photo study of the Gulf War.

-wants&disposals-wants&disposals-wants&disposals-wants&disposals-wants&disposals-wants&disposals-

"I need some help from the SAFCH community to finish two projects -- a Squadron/Signal Publications 'In Action' on the A-4 Skyhawk and an article on the OV-10 Bronco for a future issue of AIR INTERNATIONAL. All contributors will be most gratefully acknowledged and properly credited for their contribution. Those who make significant contributions will receive a copy of the book/magazine. I am looking for good pictures (preferably original 35-mm Kodachrome color slides) and other information as outlined below.

"A-4 Skyhawk: Need photos/slides of Australian A-4Gs and their companion TA-4s; Argentine A-4P and A-4Q in pre- and post-Falklands schemes; Indonesian A-4s of any sort; any photos of Israeli A-4E/F/H/N and TA-4 variants, and especially any photos showing unit markings or insignia; Kuwaiti A-4KU and TA-4KU in pre- and post-Iraq invasion markings; New Zealand A-4Ks; and Singapore A-4S, TA-4S, and 'Super Skyhawk' conversions in unit markings. Also looking to acquire copies of the NATOPS flight handbooks on the A-4E/F/M/C/L. "OV-10 Bronco: Need especially photos of OV-10s in Indonesian, Thai, Venezuelan, and Moroccan service. Also (although not exactly SAFO-type information -- yet) I am looking for information on the USAF's laser designator used by Broncos in Southeast Asia; and any material showing the camouflage and markings carried on USMC OV-10 squadrons VMOs 1 & 2 in operation Desert Shield/Desert Storm. I need to obtain copies (loan, sale or trade) of the NATOPS flight handbook on the USMC OV-10A and OV-10D and Air Force 'Dash One' and 'Dash 34' on the OV-10A. Finally, I need details on the USAF's PACER BRONCO modifications."

Bob Mills (SAFCH #139), 2413 South 9th St., Arlington, VA 22204-2302.

"It was through the SAFCH that I started my card kit collection. I photocopy the kits to 1/32 scale and use the copies as a pattern to construct a model from plastic. I would like to get either originals or photo copies of the following card models: Geli Models GL#59 Jaguar; Kartinow Commonwealth Boomerang; Maty Modelarz 1958 #2 Zlin-26, 1958 #7 RWD-9 (or 1968 #3), 1959 #4 Ikarus, 1959 #11 An-2, 1960 #5 Griffon II, 1960 #6 Lockheed XFV-1. 1962 #3 Spad 51-C1, 1962 #5 Brygadyr, 1963 #8 Delfin, 1963 #11 Iskra, 1964 #2 Bloch-152, 1964 #9 UT-2, 1966 #1 La-11, 1966 #5 An-12, 1967 #4 RWD-6, 1967 #11 MiG-3, 1969 #4 Bies, 1969 #5 Karas, 1969 #8 RWD-5bis, 1970 #5 Tu-2. I presently am paying \$5.00, including postage, for photo

copies of card kits, but I am open to offers and trades.

"Over the years, I've built up quite a pile superfluous kits and extra photo copies and I am interested in corresponding with other modelers who might be interested in these either for purchase or trade."

Jim Merrigan (SAFCH 857), 23 Maryland Ave., West Long Branch, NJ 07764. (Phone (908) 229-4181.

[Editor's note: Jim sent a nine-page list of kits (aircraft and architectural) he has available for sale or trade. This list is too long to reproduce here but anyone interested should contact Jim. You might want to include a large self-addressed envelope along with two 1st class stamps.]

"I am looking for good 3-view plans of the Keystone B-3/B-4 bombers to use as the bases of drawings to be included in the update of my book on the Philippine AF."

Alberto A. Anido (SAFCH #3), PO Box 1406 MCC, Makati 1299, Philippines.

"I am currently putting together an article on Latin American Canberras. I have at least one photo of an aircraft for Venezuela, Chile, Ecuador, Peru, and Argentina. In most cases, I have several. I need more information on their operational use, especially combat. Any help will be acknowledged and will be greatly appreciated."

Don Van Winkle (SAFCH #968), 9302 Kings Cross, San Antonio, TX 78250.

"I am starting a project on the markings carried by Soviet-designed aircraft which have scored air-to-air victories. I am especially interested in aircraft which carry 'kill' markings denoting their victories. Many of these aircraft will belong to the smaller air forces: North Vietnam, Pakistan, India, Egypt, Syria, and Iraq, to mention a few. I would like to correspond with anyone who can help with this project."

David Knights (SAFCH #1171), PO Box 22272, Louisville, KY 40252.

"My request for information on T-Birds (SAFO #55) did bring in a few responses, but none on the particular information I need. So, let's give it another shot: I'm looking for information and photos of Canadian-built T-33a in the air forces of Greece, Turkey, Portugal, and Bolivia. The Canadair T-33s are recognizable by a small covered vent just forward and below the windscreen and an

oval vent on the port tail section."

Jim Lyzun (SAFCH #920), RR #5 Thunder Bay, Ontario, Canada P7C 5M9.

"Complete run of AIR CLASSICS, 1977 to present. Also, nine volumes of AIR ENTHUSIAST, July 1971 to December 1975 (6 months in each volume). Send your bid, including SASE or SAS postcard, to:"

Burt Leake (SAFCH #665), 4291 Larchwood Place, Riverside, CA 92506.

"I've recently received a letter from a couple of Russian modelers interested in trading or exchanging kits, drawings, and photos. Please publish the following information in our 'Wants' section:

"Svaiaoslav I. Kruglov, Titova 13/9, 32005 Dnepropetrovsk-55, USSR. He offers a large selection of kits (more than 150 types) of aircraft, ships, cars, space, military, and figures in plastic, metal, and card, in various scales. He is interested in models of aircraft (1/48 % 1/72), military (1/35 to 1/87), cars (1/24, 1/43. & 1/87), and figures (1/24 to 1/87).

"Wladislaw A. Litwin, Savkina 6/110, 32099 Dnepropetrovsk-99, USSR. He collects Spanish Civil War aircraft and wishes to contact a modeler with interests in pre-WWII aviation."

James Maroney (SAFCH #850), 928 75th St., Brooklyn, NY 11228.

"I'd like to contact anyone with a curiosity about small-air-force use of the Bf-109 - particularly post-war. For instance, how were those Bulgarian 109G's marked before they were traded to Yugoslavia for Il-2 tails?"

Barry Numerick (SAFCH #758), 106 Cameron Dr., Irwin, PA 15642.

"Please let out readers know that our Bulgarian friend has a new address: Cvetelin D. Ivanov, Veliko Tarnovo 5000, str. Poltava 7, v."A" et.6 ap.22, Bulgaria."

Tony Morris, Ashbourne House, Marsh Gibbon, Bicester, Oxon OX6 0HW, England.

"Please put a note in the SAFO informing all my SAFCH friends of my new address. I would hate to hate to lose track of someone just because I forgot to send a change of address."

Colin A. Burgess (SAFCH #401), PO Box 32759, Braamfontein 2017, Republic of South Africa.

magazines-magazines-magazines-magazines-magazines-magazines-magazines-magazines-magazines-

"The Polish Profile-like publication on the Su-22 is a new effort and it is excellent. The reader unfamiliar with the Polish language will appreciate the color photos of airframe details, scale drawings, unit insignia, color 2-view with FS color equivalents, and excellent b&w photos. All this is produced in a Western-style layout and standard. "Fanatyk Plastik" is a new Polish modelling

magazine produced by a small group of enthusiasts. It is comparable to a small-country IPMS publication and contains color information, detail sketches, and data on mostly WWII equipment. The first three issues features color chips of WWII British camouflage colors. Issue 3/91 has articles of the PWS-26 and the Iskra, as well as the M-113, FW-190, Jeep, and A. S. Exupery. These publica-

tions should be available from your Polish correspondent."

Jim Lyzun (SAFCH #920), RR #5 Thunder Bay, Ontario, Canada P7C 5M9.

REPUBLIC P-47 THUNDERBOLT: The Final Chapter : Latin American Air Forces Service, by Dan Hagedorn. 64 pages 8.5 in. by 11 in.; 126 photos, 30 in color; 8 color drawings. Phalanx Publishing Co., 1051 Marie Ave., St. Paul, MN 55118. Soft cover, \$14.95.

"The 36,000-word narrative begins with a description of WWII operations of Brazil's No. 1 Squadron in the MTO and Mexico's 201 Squadron in the Western Pacific. This is followed by a summary of the evolution of Central and South American air forces and the postwar US aid programs that provided 13 Latin American air arms with Thunderbolts. Flown until the early 1960s, Thunderbolts participated in counter-insurgency actions and banana-war intrigues involving the CIA, mercenaries, and dictators; actions that are barely known today. Lush appendices supply combat statistics and detailed tables tracing the history of individual P-47s."

TRIADA No.7, ILUSTROVANA HISTORIE LETECTVI: Letov S-328, Bristol Beaufighter, MiG-19. 146 pages, 21 cm by 30 cm. Softbound.

Larger pages and color photos are to great advantage in this first of the new Triada format. It still follows the standard Triada structure of three sections, each describing one of the title-aircraft types. Each 40-page section contains text, detailed sketches, photos (some of those for the MiG-19 are in color), and color camouflage drawings; while the scale drawings are concentrated in the appendices. The MiG-19 section contains 23 b&w photos and 5 color photos, 3 detailed sketches, and 25 camouflage schemes: Czech (7), Soviet (3), Polish, Hungarian, Chinese (2), Egyptian (3), Pakistan (4), Albanian, and Syrian, plus two schemes for the Chinese Nanchang Q-5.

The S-328 section contains 29 photos, 3 detailed sketches, and 22 camouflage schemes for Czech (2), Slovak (5), and one Bulgarian aircraft. Included are several color drawings of S-328 used during the Slovak National Uprising in 1944. One of these had hand-painted red stars over Slovak national markings, but it is not a Soviet aircraft.

The Beaufighter section contains 29 photos, one detailed sketch, tables of victories by Czech pilots flying this type in WWII, and 27 camouflage schemes of Czech, Canadian, Australian, and RAF aircraft (two post war aircraft).

Three new Triada books are in preparation: DH Tiger Moth, Avia C-2, Aero L-29 Delfin; Avia B-534, Spitfire I/II, MiG-21F/PP; and Aero A-100/101, DH Mosquito, Yak-25/28.

Daniel Petz (SAFCH #623), Na Ladvi 21, 182 00 Praha 8, Czechoslovakia.

[Editor's note: Daniel's praise for this new format is much too mild. This volume is fantastic! The larger pages are used to the best possible advantage; the photos are large and extremely well reproduced (about as good as can be done without going to glossy paper). The color drawings are, as usual, done in accurate and vivid colors. However, now they are much larger, with only 3 or 4 side-view drawings to a page, and numerous pages devoted to 4-view color drawings of a single aircraft. A real surprise is the Slovak S-328 with yellow eastern-front marking not only on the wing tips, cowl, and fuselage, but also on the rudder, the entire horizontal fin, and both sides of all 4 ailerons. The scale drawings are excellent; the Beaufighter is particularly notable with many variants and modifications illustrated.

While the "blow-torch" boys are going to love this

volume for its coverage of the MiG-19, and the enthusiasts of "real" airplanes will love it for the Letov, those who ignore the Beaufighter section, will be making a big mistake. The color plates in this section breath new life into this tired, old war horse. Not only does the table list the serial and code numbers of the Beaufighter flown by Czechs who destroyed German aircraft (along with the date and type of aircraft destroyed), but many of the photos and color drawings depict the actual Beaufighters flown.

Hallelujah! This book is the first I've ever seen where the color drawings on the covers are the not the same as those inside. All other publisher simply use a duplicate. When I asked a couple of publishers why don't they use different color drawings on the cover, they replied that the main cost of color drawings was the artists fee and not the printing costs. (I'll pause here until all you "rich" artists stop laughing.)

This Triada will send the modeler scurrying for the KP kits of the S-328 and MiG-19. Fortunately, Squadron Shop has just lowered the price on all their KP kits; these two are both \$3.95 now (but don't forget the \$3.00 postage).

Daniel sent a fair number (23) of Triada #7 for sale through the SAFO. The price he is asking is much less than the 100% increase in the cost of the book in Czechoslovakia. If you order this volume now, you might consider sending extra money to cover the forthcoming volumes. And, be sure to stock up on the KP kits of the Avia C-2, Avia B-534, and Aero A-100 and don't forget the 1/48-scale MPM vacuumform kits of the B-534-I and -IV. (Can we look forward to a 1/48-scale S-328?)

SUKHOI Su-27 FLANKER, by Dennis Jenkins and Jay Miller. 42 pages, 8.5 in. by 11 in. Softbound. \$9.95.

"This is the first English-language reference describing the history of this aircraft. Complementing the extensive text is a selection of photographs taken specifically for this book. High-quality images of the Su-27 cockpit are provided, including not only the single-seat Su-27A, but also the rarely seen two-seat Su-27B (both front and back seats and all four consoles). Information concerning the Su-27 carrier trails aboard the Tbilisi is included, along with numerous illustrations of the aircraft's weapons and systems. This book contains over 20,000 words of text, 4 pages of color, over 100 overview and detail photos, and multi-view drawings."

Speciality Press, 1213 North Second St., Stillwater, MN 55082.

[Editor's note: The book states "Though there have been considerable number of rumors pertaining to non-indigenous Su-27 sales, to date, imagery of Su-27 in non-Soviet markings has yet to surface." Countries rumored to have the Su-27 include Iraq and Afghanistan.]

Also available from Speciality Press, but not of small-air-force interest, is "The Real Heroes: A Special Salute to the United States Air Force", a 192-page hardbound book consisting of 200 color photos by Randy Jolly. All the major aircraft types used in Desert Storm operations are included, many in "striking air-to-air". Cost \$39.95 and available in December 1991. One copy of the 6-page "blad" is available from the SAFCH editorial office for postage \$0.98.]

WINGS OVER THE MEXICAN BORDER, by

Kenneth B. Ragsdale. University of Texas Press, 1984.

This book discusses the use of airplanes in the Big Bend region of west Texas. Most of the text concerns US military and private aircraft, but there is a chapter devoted to Mexican Air Force activity and aircraft in the 1920s in this area. Included are photos of a Curtiss A-3, DH-4, Consolidated PT-3, Douglas C1C & BT-2, and Fokker Trimotor C-7A, all in US Army Air Corps markings. There are also photos of a Rebel aircraft that was bombed by Major R.L. Andrews, a Federal Mexican Corsair and its two Mexican pilots, and a line-up of four Federal Mexican aircraft including two Stearmans, a Travel Air, and what "appears to be" a Corsair. Also listed in the text are the aircraft used by the rebels in the "Escobar Rebellion (1929)", as well as stories of air operations and dealings to obtain aircraft by both sides in the conflict.

WINGS OVER THE BORDER, by Stacy C. Hinkle, Texas Western Press, 1970.

This book, although of little interest to the true small-air-forces fan, gives a personal account of the air operations over the Rio Grande from 1919 through the early 1920s by the US Army Air Corps. Most of the activities involved reconnaissance, but there was one incident where the rear gunner of a DH-4 fired upon Mexican bandits and killed their leader. Photos include one of the author in flight gear, several DH-4s which was the primary aircraft type used, and a shot of the "S.S. Twin", an Air Corps airship."

CAPTAINS AND KINGS, Neville Birch and Alan Branson. Sir Isaac Pitman and Sons, Ltd., 1970.

This book tells the stories of several pilots of a "royal" nature, hence the title. Most of the text deals with fairly modern personalities, including King Hussein of Jordan, as well as many other kings, princes, etc. from the past and present and relates their flying experiences. Several small-air-force aircraft are depicted, but the one that stands out is the Lohner used by the Spanish Air Arm during the Spanish-Moroccan War of 1910 to 1925 or so. The text also mentions the use of Nieuport monoplanes and Maurice Farmans in addition to the Lohners in this conflict.

MEN AND WINGS, Assen Jordanoff, Curtiss-Wright Corp. Airplane Division, 1942.

This book deals with many aspects of aviation and has many photos of aircraft up to 1942. Of small-air-forces importance are the photos of a so-called "Albatross" aircraft flown by a "Col. Radol Milkoff" during the Balkan War of 1912-13. There are also photos of a hanger in which the author is working on "the panel of one of the early airplanes" of the conflict. the author states that this plane was flown in a Bulgarian fighting unit and gives a description of aerial bombing of the time.

Author's note: The four books described above are in my local university library and make some interesting reading. If anyone wants more information, please contact me.

Dan Van Winkle (SAFCH #968), 9302 Kings Cross, San Antonio, TX 78250.

THE THIRD BROTHER, The Royal Australian Air Force 1921-39, by C.D. Coulthard-Clark. 500 pages, 140 illustration. Hardbound. A\$39.75 including postage from RAAF News, Department of (Continued on page 134)

AIR WAR OVER GREECE

Part I: 28 October to 5 December 1940

Doug Dildy

Chapter 1 Elleniki Vassiliki Aeroporia

The airplane is the weapon of the weak. The daring nature of the Greek people shall render it a significant weapon in wartime.

Prime Minister E. Venizelos
Athens, 1912

These words were uttered after the Prime Minister of Greece stepped down from the cockpit of the Nieuport monoplane "Aakyon" (or "Alcyon" -- "Kingfisher") after a flight with the first Greek airman, Mr. E. Agryopoulos (5:84). On the eve of the Balkan War, the Greek Prime Minister recognized immediately the military potential of the "aeroplane" and in September of that year established an air unit within the Royal Hellenic Army (18:63). The Greek government purchased a few Henri Farman biplanes from France and on 24 January, 1913, Capt Demetrios Kamperos flew the airplane's first war mission -- naval reconnaissance of the Dardenelles during the Balkan War (5:84, 85).

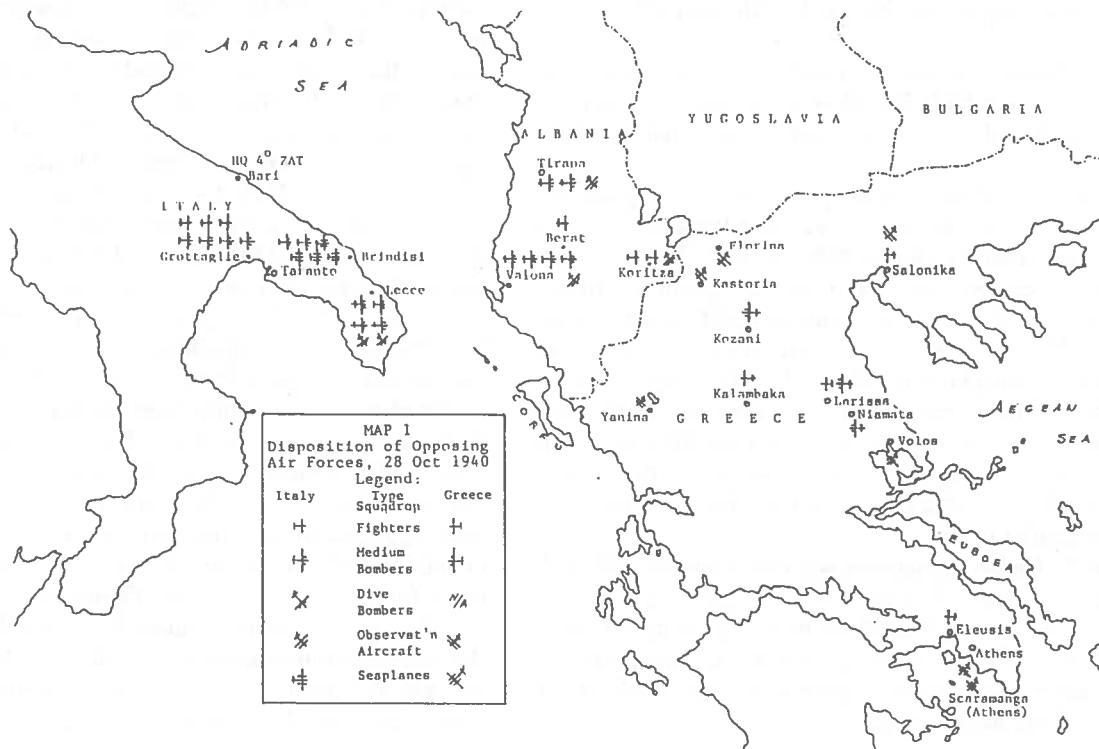
While the rest of Europe was embroiled in World War One, Greece remained essentially neutral, hoarding its small collection of (mainly French-built) aircraft. The air organization grew past the size of a single squadron, however, and was restructured in 1917, being renamed the Hellenic Army Air Force. By December, 1929, the service had grown to three regiments and was retitled again as the Hellenic Combat Air Force. This was in recognition of the new found semi-autonomy that resulted from

the air arm being moved from the Army to the newly created Ministry of Air. The name stuck for only five years and in 1935 the service was once again renamed, this time to the Royal Hellenic Air Force, or, in Greek, the Elleniki Vassiliki Aeroporia (EVA) (18:63).

By this time the three regiments -- one each of army support, naval cooperation, and fighters -- had become commands, each with two to four squadrons assigned. New equipment was being sought and procured from several European nations as the war clouds gathered over the Continent. At the end of the decade, as the war erupted and threatened to engulf the Balkans, aid was requested and received from Britain and France, allowing the establishment of the bombing arm and the Anti-Aircraft Command.

Towards the end of October, 1940, the EVA consisted of a modest force of a heterogeneous assortment of aircraft that varied from World War One vintage observation planes (Breguet.XIX and Potez 25A) to (nearly) the most modern British light bombers (Battle and Blenheim) and French fighters (Bloch 151). Appendix 1 provides a complete listing of the EVA Air Order of Battle (AOB) and its geographical dispositions are depicted on Map 1. On October 28th, 1940, the day World War Two came to Greece, the Elleniki Vassiliki Aeroporia consisted of:

The Army Higher Air Forces Command, subordinated to the General Commanding Land Forces, provided four observation squadrons to the divisions along the front lines. These units were:



1st and 2nd Mira Stratiotkis Synergassias (Ground Support Squadrons): were descendants from the original aero squadron of the Royal Hellenic Army that was formed in 1912. Primarily equipped with French (WWI-vintage) observation aircraft types, these two squadrons were re-equipped in 1925 (8:46a) with 30 Breguet XIX A.2/B.2 reconnaissance biplanes (9:349). Serialled in the "Sigma"-400 series (Greek markings usually used the traditional Greek script), these aircraft were originally delivered in an all-over medium (or "bottle") green with the national insignia in four positions on the wings, with vertical blue-white-blue rudder striping, and with the serial in large white letters on the fuselage sides and beneath the lower wings (12:21). These popular and efficacious biplanes were used heavily and attrition had accounted for twelve of them by the Fall of 1940. Thus, each of the two squadrons had nine Breguet.XIXs on strength by the time the Italians invaded. However, spare parts for these elderly and obsolete biplanes had become scarce and only half of them were serviceable at the outset of hostilities (15:27). Anticipating the war's arrival, the EVA began camouflaging their aircraft, repainting the Breguet.XIXs in a olive-green/sand-brown scheme with light blue-grey undersides. The new finish painted over the rudder striping, but additional national insignia were applied to the fuselage sides (photo, 15:12). (See Figure 1)

3rd Mira Stratiotkis Synergassias: was formed on 16 Henschel Hs-126A-1s acquired from Germany in 1939 (20: 116). Greece was the only foreign nation to use these high wing observation planes and it is assumed that they were delivered in the standard Luftwaffe splinter camouflage scheme. They were serialled in the "Eta"-3 series (15:66). By the end of October, the unit strength was reduced by one aircraft, 15 Hs.126s were operational and serviceability was high (15:27).

4th Mira Stratiotkis Synergassias: was formed on the leftovers of the Potez 25A biplanes that Greece had procured almost twenty years before. These WWI-vintage, cloth and wood observation planes had first flown two years before the Breguet.XIXs that supplanted them. Now, with the rest of Europe engulfed in war and tensions in the Mediterranean rising, the 17 remaining Potez 25As were gathered into a fourth ground support squadron (15:27).

The Navy Higher Air Force Command, subordinated to the Navy Commander-in-Chief, provided three naval cooperation squadrons to the Royal Hellenic Navy for maritime patrol. These were:

11th Mira Naftikis Synergassias (Naval Support Squadron): was initially formed on six Hawker Horsley torpedo bombers purchased from Great Britain in 1929 (12:118). The maritime patrol of the Aegean Sea was naturally very important to the Greeks and until this time had been done primarily by land-based aircraft. The Horsleys, however, were soon replaced and relegated to the float-plane training role. Their replacements were the elegant, three-seat Fairey IIIF float-reconnaissance biplane, purchased in the early 1930s. The new IIIFs soldiered through the decade and, in January, 1940, when the British services declared their's obsolete (9:510), the EVA still had nine of these on strength (15:27).

12th Mira Naftikis Synergassias: was established in 1938 with the purchase of a dozen Dornier Do.22W (the Greek export model was known as the Do.22Kg) from Germany (20:105). These three-seat parasol monoplanes were delivered (on wheeled undercarriages) in an aluminized dope finish. After arrival they were mounted on their twin floats and were serialled

in the "Nu"-20 series ("N" for Navy) (photo, 15:45). (See Figure 2)

13th Mira Naftikis Synergassias: was established in 1939 at the Scaramanga Naval Base near Athens. From here, the Do.22s of the 12 Mira were launched into the water and the new, twin-engine AVRO Anson Mk.Is flew off the airfield (photo, 15:5). Twelve of these coastal patrol aircraft were ordered in 1936 (7:137) and arrived three years later to form the third naval support squadron. These were the first twin-engined, retractable gear airplanes in the EVA inventory and the unfamiliar complexity resulted in the loss of several of these in the first year of operations. The unit had nine Ansons on strength at the time of the Italian invasion (15:27).

The Fighter Command, subordinated to the General Commanding Land Forces, provided three squadrons for the air defense of troops, forward staging points, supply lines, and sea ports. These were:

21st, 22nd, and 23rd Mira Dioxeos (Fighter Squadrons). Late in 1937, to early 1938, the EVA held a fighter competition to determine which of the emerging designs would become its front-line interceptor. At that time the Fighter Command was equipped with the remainder of 25 Gloster Mars VI Nighthawks (a derivative of the WWI Nieuport Nighthawk) acquired from Britain early in 1923 (4:307). The chief competitors in this contest were the Czechoslovakian Avia B.534, an enclosed cockpit biplane, and the Polish PZL P.24, an open cockpit monoplane (a significantly more powerful version of the classic P.7/P.11c design). Six of the B.534s and five P.24As were purchased for the evaluation (10:28/20:184). In January, 1938, a Greek businessman purchased a pair of Gloster Gladiator Mk.Is (2:131) for 9200 Pounds Sterling (15:48) and presented them to the EVA, presumably to also participate in the competition. In the event, the P.24s won the contest and a contract for 36 of these fighters (including the original five) was let. The B.534s and Gladiators were relegated to the advanced/fighter training role (10:28/15:28). Meanwhile the PZL designers had improved their basic product by installing the even more powerful (970 hp) Gnome-Rhone 14NO7 engine in a redesigned NACA cowl, modifying the forward fuselage to more aerodynamically accommodate the larger radial, and adding armor protection. The new model, the P.24F, retained the original armament of one Brownling 7.9mm machine gun in each wing and an Oerlikon 20mm cannon in each wing strut fairing. However, a shortage of the latter resulted in the last six aircraft (of the 36-plane contract) being armed with four 7.9mm machine guns instead. These were designated P.24Gs (20:184). The P.24s were delivered in a pristine bare-metal finish and were serialled in the "Delta"-100 (D-100 to D-136) series (photo, 15:1). With the approach of hostilities, they were repainted in the standard EVA scheme of olive-green and sand-brown upper surfaces / light blue-grey undersides (20:14). While most photographs from the period show black serials, at least one P.24 (D-112) is known to have white serial numbers on its sides (photo, 15:246). Others are known to have retained their wheel spats (photo, 15:298). They were well liked by their pilots and all 36 remained on strength in October, 1940, but only two thirds of them were serviceable and ready for combat (15:27). (See Figure 3)

The Anti-Aircraft Command was established to organize the various Army anti-aircraft artillery (AAA) batteries in the defense of Athens, sea ports, and other strategic points in the rear areas. After the bombing of Warsaw, Poland, in September,

1939, the EVA decided to acquire additional squadrons of more modern fighters for this command.

24th Mira Dioxeos was formed to accept the first dozen of 25 Bloch 151 fighters ordered from France. However, Hitler's invasion of France intervened and the French withheld the last 16 airplanes for their own defense (11:187). Of the nine that arrived, only six were fully equipped with armament, gunsights, and radios (8:46a). This half-dozen became the operational strength of 24 Mira, the other three being carried as unserviceable (15:27). This squadron was based at Thriassion Eleusinos (Eleusis) for the defense of Athens (11:189). (Figure 4)

The Combat (bomber) Command was established during the last few months prior to World War Two in order to provide the EVA with an offensive arm. Like most of the other commands, this organization was subordinated to the General Commanding Land Forces. It consisted of three squadrons equipped with three different types of light bombers, all provided in the haste that accompanied the approaching conflict. These three squadrons were:

31st Mira Vomvardismou (Bomber Squadron): was established in 1939 to receive the first dozen of 24 Potez 633 twin-engine light bomber/recce aircraft ordered from France. However, only a portion (11) of the order was fulfilled, the French Armee de l'Air taking over the remaining 13 aircraft with the outbreak of the war in September, 1939, (13:150). Like the Bloch fighters, the Potez light bombers delivered lacked bombsights, some armament, and spare parts (8:46a). As a result of the last item, only eight of these new bombers could be maintained in a serviceable status (15:27).

32nd Mira Vomvardismou: Although initially intended to operate the second dozen Potez 633s, these aircraft were not delivered and the Greek government searched for a suitable substitute. The RAF was willing to relinquish 12 Bristol Blenheim Mk.IVs to fill the Greek request. These aircraft were apparently delivered in the standard EVA camouflage colors of olive-green and sand brown over light blue-grey. They were serialised in the "Beta"-250 ("B" for bomber) series. Only one of these fast light bombers was not serviceable a year later when the war finally came to Greece (15:27). (See Figure 5)

33rd Mira Vomvardismou: was formed in early 1940 to operate a dozen Fairey Battle Mk.Is. Originally, in 1939, nine of these relatively advanced, single engined light bombers were ordered, but with the German invasion of Poland, this order was immediately taken up by the RAF. After the initial convulsions of the war, during the "drole de guerre" ("Phoney War") the RAF released a dozen Battles from its production contract (1:133) and they were sent to Greece. These airplanes arrived in the standard RAF camouflage of the day, dark green and stone brown topsides with black undersides and were serialised in the "Beta"-280 series. Two of the dozen Battles were unserviceable on the morning of 28 October, 1940 (15:27).

Thus, when World War Two, in all of its horror and glory, finally came to the peaceful Balkan nation of Greece, it found the Greek Air Force to have equipped itself as best it could, with a multifarious collection of the modern and the outdated. With the touted "daring nature of the Greek people" mentioned by the Greek Prime Minister almost 30 years before, the EVA would not only give a good account of itself, but with the help of the RAF, would render a stinging defeat to the first Fascist nation that attempted to subdue it.

Chapter 2 Esigenza "G"

Hitler always faces me with a "fait accompli." This time I am going to pay him back with his own coin. He will find out from the papers that I have occupied Greece!

Benito Mussolini
Palazzo Venezia, 12 Oct. 1940

The nation of Albania was established as a result of the Balkan Wars early in the 20th Century and during World War One it was made an Italian protectorate. The Italians quickly attempted to extend their influence into northwestern Greece, an area known as Epirus, but were ordered to withdraw by the Allied Conference in Paris in 1917. Although they complied, the Italian interest in the area was now well-established (15:3). Sporadic incidents of terrorism and political confrontation continued through the next two decades, culminating, after Mussolini's annexation of Albania in April, 1939, in overt acts of violence against the Greeks while Hitler's Germany led the rest of Europe into the great conflagration of World War Two.

Mussolini followed Hitler's course, joining in on Germany's invasion of France, attempting to reap maximum benefits from his minimum and tardy involvement, a month after it began. On 10 June, 1940, Italy declared war on France and Great Britain. But the superficial investment yielded little return and while Hitler's power and prestige approached its zenith, Mussolini grumbled and stomped about, frustrated. In an effort to bolster Italy's martial image, on 28 June, he ordered his Libyan Army to invade Egypt.

The Italian military machine was ill-prepared for offensive action, but through the persistent goading of his Libyan Army Commander, Marshal Rodolfo Graziani, he finally got some action. The Italian 10th Army attacked on 13 September but after capturing Sidi Barrani four days later, it halted to regroup and resupply (6:270). Compared to Hitler's roaring blitzkriegs, the Italian advance along the almost undefended North African coast looked stalled. No amount of prodding or humiliation would get Marshal Graziani to move again. So "Il Duce" would have to look elsewhere for a prestige-building victory.

With his East African Army cut off from Italy by the British in Egypt and his campaign against them stalled at Sidi Barrani Mussolini saw only one other opportunity for the elusive glory of victory, An Italian invasion of Greece from Albania. Since July, 1940, the Comando Supremo had prepared "Esigenza 'G'" (Exigency "G") for the occupation of the Ionian Islands (Corfu, Levkas, Cephalonia, Zante) and the Epirus province of Greece (15:4).

Accordingly the Italian Army of Albania was almost doubled in its size during September -- reinforced by 3 divisions of some 40,000 men, 700 vehicles, and 7700 horses (15:6). Similarly the Albanian Air Command, originally starting the war with a Stormo (a 4-squadron wing) of Savoia S.81 fixed-gear trimotor transport-bombers, one Gruppo (a 3-squadron group) of Fiat CR.32 biplane fighters, and a Gruppo of Ro.37bis reconnaissance biplanes (16:19): a force totaling only 61 aircraft. This was reinforced by a Gruppo of the more modern Savoia S.79 trimotor bombers and the fighter group was upgraded to the more powerful Fiat CR.42 biplane and the new but unimpressive Fiat G.50 monoplane (15:7). The Albanian Air Command could rely on strategic bombing support from the 4th Zona

Aeronautica Territoriale (ZAT) based on the "heel" of the "boot of Italy". It could contribute 3 Stormi and a separate Gruppo of medium bombers (14 squadrons) and a Gruppo of Ju.87B Stukas (2 squadrons) to the campaign. This force totaled some 224 aircraft against the EVA's 149 (15:22-27). A complete "Regia Aeronautica" Air Order of Battle is provided at Appendix 2 and depicted on Map 1.

However, even this force -- both on the ground and in the air -- was not considered sufficient for defeating the Greeks. Consequently, when Mussolini announced to his General Staff on the 15th of October that he planned to invade Greece in 12 days they were appalled (6:275)! "Esigenza 'G'" required 20 divisions, not seven! Additionally, the inadequate ports and the primitive roads required the stockpiling of significant quantities of supplies and reserves -- a task that would take three months. Mussolini allowed his generals a two-day extension (6:275).

"Esigenza 'G'" called for a major thrust down the Epirus Plain between the Pindus mountain range and the Ionian coast. The objective was to capture the port of Preveza and with reinforcements and supplies pouring in through that much better facility, then turn southeast and advance upon Athens. Naively, the commander of the Italian Army of Albania, General Sebastiano Visconti-Prasca, acquiescing to the allure of glory, assented, stating that the lack of time prompted Greek preparations as well and that he should have no difficulty opening a campaign with his current forces. He predicted that he would take Athens by the end of the year (6:276)!

General Visconti-Prasca arrayed his army across the 90 mile front in three groups: a corps on the left flank facing the Morova Massif, a single Alpini Mountain Division astride the Pindus mountain range in the center of the line, and two corps on the Epirus Plain (6:283). The Greeks were prepared to meet the major thrusts with a single infantry division on the flank and the plain and would match the vaunted Alpini with a regiment of their own Evzones -- the famous, tough, kilted mountain troops (15:8). In hopes of a quick, blitz-like victory, almost all of the Italian armor and mechanized forces were concentrated in the two corps of the 11th Army -- on the Epirus Plain (6:283).

Chapter 3

The First Week - The Italian Invasion

28 October - 4 November

Fuehrer, we are on the march! At dawn this morning our Italian troops victoriously crossed the Albanian-Greek frontier!

Benito Mussolini greeting Adolf Hitler at the train station in
Florence, Italy
28 October 1940

At 0530 hours on 28 October, 1940, the seven Italian divisions advanced across the Albanian border and in the initial clashes with the Greek defenders, sent them reeling back. They were covered by patrols of Fiat fighters of the 160 Gruppo Autonomo C.T. and deteriorating weather. Around 1000 hours, near Drenowa in the Eastern Sector, a formation of three 393 Squadriglia CR.42s spotted a 3 Mira Hs.126A that had been sent to reconnoiter the invading Italian 16th Army Corps. The CR.42s attacked at once and shot the hapless Henschel down. The crew survived unhurt, but the "Elleniki Vassiliki Aeroporia" had suffered the first of its many losses (15:2).

The poor weather initially precluded much air activity, but in the afternoon "Regia Aeronautica" offensive operations finally got off the ground with a formation of eight Savoia S.81 (from 38 Stormo B.T.) attempting to cut the road being used by the Greek forces retreating towards Yanina. These bombers were followed by formations from the 37th and 47th Stormo of the 4th ZAT on the Italian mainland and from the 105th Gruppo Autonomo B.T. based at Tirana, Albania. One of the slow S.81s of 37 Stormo's 55th Gruppo was hit by anti-aircraft (aa) fire and, badly damaged, it crash-landed as soon as it made landfall in Italy, the "Pipistrello" ("Bat") being written off in the process. Thus, the Italians, too, had experienced their first loss of the long, frustrating, and embarrassing campaign (15:11).

The following day the weather turned from bad to worse, precluding any flying activity by either side. Heavy rains began which forced the Italian armor and motorized and horse-drawn transport to keep to the few primitive roads. These were quickly churned into rivers of mud by the wheels of the many passing vehicles (6:282). Every ravine was transformed into a raging torrent and, as the Greeks withdrew, they demolished bridges and caused landslides, turning the difficult terrain to almost impassable (6:283).

After blowing the bridges, the Greek 8th Infantry Division wisely retreated across the Thiamis River, falling back towards Yanina. In spite of the bad weather, Hs.126As of 3 Mira were out, attempting to keep contact with the advancing Italian columns. Early in the day a pair of Henschels were chased away by a three-ship section of Fiat CR.32s (394 Sqd), escaping by ducking into the thick clouds. Later, another pair were not nearly so lucky. Jumped by a formation of five CR.42s (393 Sqd), one of the Hs.126s was shot down outright, its pilot -- 1Lt Evangelos Yiannaris -- becoming the EVA's first official casualty of the war. The second Henschel was heavily damaged and initially escaped into the clouds, but it never returned, its crew listed as Missing In Action (15:11).

By the last day in October, in spite of the atrocious weather and the daunting terrain, the Italian 3rd "Julia" Division of Alpini mountain troops had advanced up the Aoos River valley to within 12 miles of the Metsovon Pass through the Pindus mountain range. Capture of this vital passageway would cut off the Greek 8th Infantry Division - defending the Epirus Plain - from their main supply base to the east.

In the air, however, bad weather continued to hamper aerial operations. In the morning a formation of ten S.81s from 38 Stormo attempted to bomb targets at the front but were turned back by heavy cloud cover. A similar effort in the afternoon also had to be aborted. Italian fighters attempted strafing attacks against two Greek front-line airfields, but this, too, proved ineffectual. Finally, at the end of the day, a pair of CR.32s were lost when they became disoriented in the weather and the gathering dust -- one of the Italian pilots becoming the Greek's first prisoner of the war.

On the first day of November, the weather finally began to clear and five days later, the "Regia Aeronautica" mounted its bombing campaign. Escorted by 393 Squadriglia CR.42s, ten Savoia S.79s of 105 Gruppo Auto B.T. bombed Salonika harbor facilities. They were attacked by seven PZL P.24s of the Sedes-based 22 Mira Dioxeos: but no losses were incurred by either side. This raid was followed by ten Cant Z.1007bis from 47 Stormo (4th ZAT), also escorted by 393 Sqd CR.42s. Combat was joined by 21 Mira PZL P.24s but this intercept proved

equally ineffective. Salonika suffered 35 civilians killed in the two attacks (15:13).

Approaching dusk, the Greeks struck back, three 32 Mira Bristol Blenheim Mk.IVs raiding two Italian forward airfields in the Eastern Sector. Drenowa went undamaged, but at Koritza, 15 Italian personnel were killed and another 20 wounded, two Fiat biplane fighters were later damaged by running into bomb craters when returning from a mission (15:13).

Over the front earlier that morning, patrolling CR.32s from 394 Squadriglia found, attacked, and brought down two of the obsolete Breguet XIX biplanes of 2 Mira that had been nosing around the front lines (15:12). The break in the weather allowed Italian air reinforcements to arrive in Albania, the 150 Gruppo Auto C.T. flying its 36 CR.42s to Tirana. Upon arrival, two of the squadrons were back in the air, escorting a raid on the island of Corfu (15:14).

Corfu was a primary target the next day (2 Nov) when the aerial offensive got into its stride. The 4th ZAT sent raids of 37th Stormo S.81s and six 96 Gruppo B.a.T. Ju.87Bs to bomb the island defenses and port facilities - a softening up for the planned invasion. On the mainland, four 38 Stormo / 39 Gruppo S-81s bombed Doliana, site of stiffening Greek resistance, without interference, but a second raid by this Stormo's 40th Gruppo resulted in one S.81 "Pipistrello" being lost to as fire (15:16).

A second formation of Stukas (5 aircraft) from 96 Gruppo Auto B.a.T. struck Yanina, a town that was rapidly becoming the main Greek base in Epirus. Because of its strategic value, the EVA Fighter Command had detached three PZL P.24s for its defense. These scrambled to intercept nine Cant Z.1007bis (47 Stormo) returning from a raid on Larissa and, surprisingly, lost one of their number to the bombers' defensive fire. Only one of the P.24s was available some time later when Yanina itself came under attack by ten more of the 47th Stormo's Z.1007s. This PZL scrambled and intercepted, but it, too, was hit by the Cants' defensive fire and crashed in flames (15:16).

The raids by the 4th ZAT on the strategic port of Salonika continued unabated with ten 50 Gruppo Auto B.T. Cant Z.1007bis trimotors attacking early in the afternoon. The 22 Mira gave a spirited defense, eight of its P.24s forcing the bombers to jettison their bombs and turn for home (15:17). One PZL pilot, 1Lt Marinos Mitralaxes, became a national hero by expending all of his ammunition into one trimotor and finally bringing it down by ramming the tail (5:85). The Cant crashed near Langada, its crew bailing out but being rounded up by Lt Mitralaxes (he force-landed his prop-less PZL nearby) and some local peasants. A second PZL was heavily damaged by the Italian's defensive fire, the pilot being wounded, but the raiders lost a second Z.1007bis near Verria, its crew also captured (15:17).

In the late afternoon it was the Greek's turn again, with three 32 Mira Blenheims again raiding the two Italian airfields at Koritza. CR.42s of 393 Squadriglia attempted to scramble and intercept the bombers, but one was destroyed on takeoff, running into a bomb blast. The biplanes failed to catch the fast light bombers (15:18).

Despite their losses, the slow, highly vulnerable Breguet.XIXs were back over the Pindus mountain range, searching for the Alpini mountain troops advancing through crevices and ravines. At 0700, one Breguet crew spotted a column of troops of the 3rd "Julia" Division approaching the vital Metsovon Pass. Without ground troops to stop them, the Greek Army

Commander, General Alexandros Papagos, called for the 1st and 2nd Mira Breguets to bomb the Italians repeatedly. The shuttle raids delayed the advancing Alpini until the defending Evzones could get into hilltop positions to protect the pass (15:19).

In the east, the Italian 16th Army Corps had failed to scale the Morova Massif. The Greek 9th Infantry Division, now reinforced, went on the offensive, driving the invaders back across the former Greek-Albanian border and advancing three miles into Albania, capturing 162 Italian troops in the process (15:19).

"Regia Aeronautica" reinforcements continued to pour into Albanian airfields with the arrival of the 24 Gruppo Autonomo C.T. and its three squadrons of (12 each) Fiat G.50 monoplane fighters. Upon landing, one squadron (361st) was detached to join the G.50-equipped squadriglia of the 160 Gruppo Autonomo at Berat and together they formed the new 154 Gruppo Autonomo C.T. Thus, the Albanian Air Command now had two groups of G.50s (4 squadrons) and two groups of CR.32/CR.42s (5 squadrons), totaling some 104 fighters against the EVA's remaining 34 PZL P.24s (with three more unserviceable) (15:22).

On 3 November, the Greek Evzones counter-attacked from their heights in the Pindus Mountains, finally halting the Alpini altogether, and the 9th Division's counter-attack in the Eastern Sector continued. But in the west, the Italian 11th Army enjoyed better success. Along the coast, the 51st "Siena" Infantry Division captured Filiates, crossed the raging Thiamis River and took Paramythia. Inland, however, the Greek resistance before Yanina continued to stiffen, halting the Italian 131st "Centauro" Armored Division and the 23rd "Ferrara" Infantry Division (6:285).

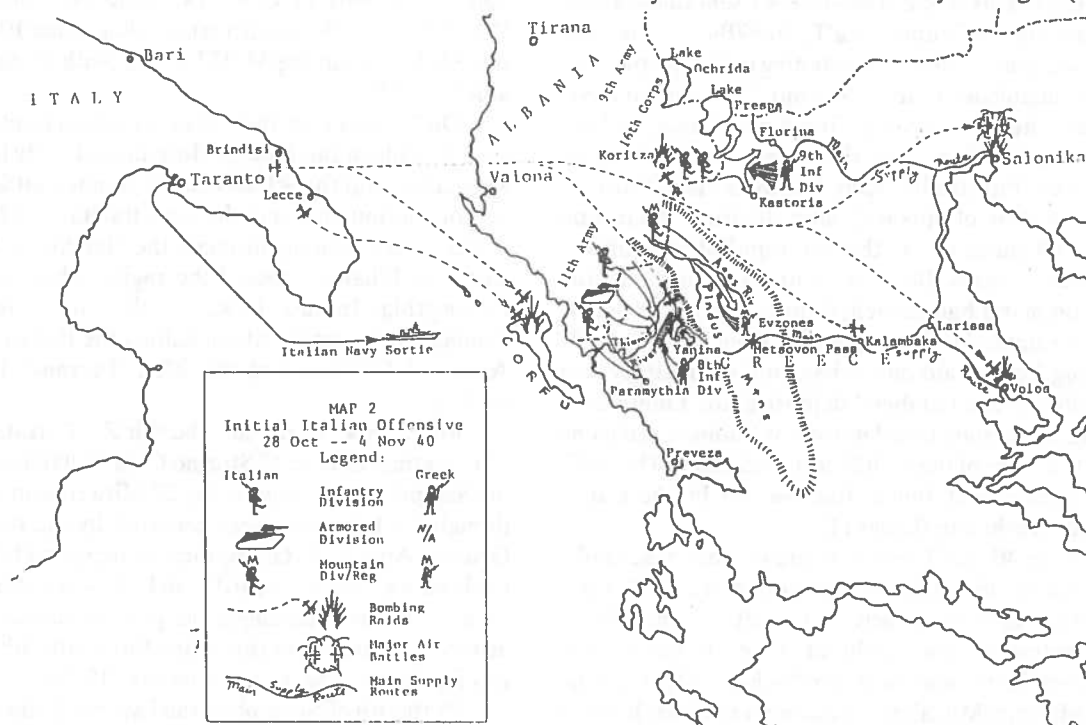
Meanwhile, in the air, the 4th ZAT strategic air offensive also continued, nine 47 Stormo Cant Z.1007bis bombers attacking Salonika again. Again, the 22 Mira rose in defense and even though the trimotors were escorted by the recently arrived 24 Gruppo Auto C.T. G.50s, they managed to bring down one of the bombers and an escort! One PZL was lost in the combat and another severely damaged, its pilot wounded. The continuing attrition suffered over this target forced the 4th ZAT to suspend any further attacks against this city (15:19).

By the 4th of November, the Evzones had stopped the Alpini in the Pindus Mountains and by skillfully using the rugged terrain to infiltrate the Italian columns, they had almost cut off the 3rd "Julia" Mountain Division. The Breguet XIXs of 2 Mira continued to press their bombing and strafing attacks in the ravines north of Distraktion. However, on this day, a trio of Breguet.XIXs was intercepted by a pair of 365 Squadriglia CR.42s. One Breguet.XIX escaped, but another was damaged, and the third, flown by the squadron commander, Major Fridericos Katassos, was shot down in flames, killing him and his observer (15:20). Nevertheless, the attacks continued and by the end of the day the Alpini had begun a precipitous withdrawal towards Albania.

Elsewhere the Italian fighters attempted to support their troops by strafing Greek forces. Albanian based bombers tried to help, losing one 38 Stormo S.81 to Greek as fire (15:20). The 4th ZAT turned its attentions to more tactical (rather than strategic) missions in support of the dying Italian offensive. The 96 Gruppo Auto B.a.T. sent a formation of four Ju.87s and the prototype Savoia Marchetti S.M.86, a twin engined dive bomber, to attack the Greek lines at Doliana, near Yanina. The S.M.86

had earlier been rejected by "Regia Aeronautica" but was given another chance under combat conditions. Flown by a Savoia Marchetti test pilot on this, its first fully operational mission, the S.M.86 failed to return, apparently lost to some non-combat cause, the pilot surviving (19:106). On the one "strategic" sortie flown, eight 50 Gruppo Auto B.T. Cant Z.1007bis bombers raided Volos harbor on the east coast -- one trimotor being damaged by as fire. Although both 21 and 22 Mira PZLs intercepted, this time they were unable to bring down any of the Italian bombers (15:20).

In the first week of combat, the Italians had lost six bombers and four fighters, but had been reinforced significantly. The Greeks had lost six PZLs damaged or destroyed and six observation aircraft. However, the weather, like the terrain of northern Greece, favored the defenders. Very soon, the situation, both in the air and on the ground, would be reversed: (Map 2 depicts the extent of the advance of the initial Italian offensive.)



Chapter 4

November - The Greek Counter-Attack 5 November - 5 December

I am confident that every Greek man and woman will do their duty to the last and will show themselves worthy of our glorious past. With faith in God and in the destiny of the Race, the Nation, united and disciplined as one man, will fight in defense of hearth and home until final victory!

George II, King of the Hellenes
Palace of Athens
28 October, 1940

A recurring, key feature of the Italian campaign in Greece - the heavy inclement weather with its hard, icy rains - returned in early November, curtailing most air activity along the front for most of the next week of the war. In the rear areas of both sides, however, it was a time of reinforcement. In Albania, on 5 November, the 104th Gruppo Auto B.T. arrived from Pisa with 15 of the

Savoia S.79 fast trimotor bombers. Joining with the resident 105th Gruppo Auto B.T. at Tirana, the two groups of "Sparviero" bombers formed the 46 Stormo B.T. (15:23). In southern Italy, the 4th ZAT received the 41 Gruppo Autonomo B.T. of 16 Cant Z.1007bis bombers and a squadron (372 Sqd) of 12 new Macchi C.200 fighters at Brindisi (15:24).

In Greece, the reinforcements consisted mainly of three RAF squadrons. (Two Yugoslavian volunteer aircrews arrived with their Breguet XIX airplanes to bolster 2 Mira.) Between 3 and 5 November, 12 Blenheim Mk.I (bomber) and Mk.IF (fighter) aircraft of 30 Squadron arrived at Eleusis Airfield, joining the EVA's 24 Mira Bloch 151s. The Blenheims undertook defensive patrols and armed reconnaissance sorties, but the first truly offensive mission was mounted by six Wellingtons of 70 Squadron that arrived at Eleusis on the 6th of November. They flew a daylight raid on Valona the next day and were met and badly mauled by CR.42s of 154 Gruppo with two bombers destroyed and another two badly damaged (with no loss to the

defenders). Daylight attacks were immediately discontinued and the remaining four Wellingtons were replaced by a second flight of six on 9 November (15:32).

Meanwhile, more Allied striking power arrived on the 8th of November in the form of five Blenheim bombers of 84 Squadron, basing themselves at Menidi Airfield, near Fatoi. Two days later this unit and the Greek Blenheims of 32 Mira were launched on offensive missions. Bad weather frustrated the British attempt to bomb Valona again, but the Greek bombers hit tactical targets near Kalpaki, north of Yanina. However, one Greek Blenheim was lost on the return flight (15:33).

On the next day (11 Nov) another 32 Mira Blenheim was lost during an armed recce run northwest of Kelcyre. It was intercepted by a formation of CR.42s from 150 Gruppo Auto C.T. and was shot down near Poligrade, the crew being killed (15:34).

By this time, the invasion was beginning to go badly for the Italians. Corfu, having been pounded by repeated air attacks, was to be invaded to secure the seaward flank of the 11th Army. But, due to the appalling weather, the Italian Navy abandoned its only attempt at an amphibious operation. On the 8th of November,

the 11th Army's offensive finally collapsed altogether and the next day General Visconti-Prasca was relieved of his command. His replacement, General Ubaldo Soddu, attempted to turn the 51st "Siena" Division inland and circle in behind the tenacious Greek 8th Division north of Yanina (6:285). By this time, however, the Greeks had mobilized its full army of 15 infantry and one cavalry division, and deployed the I Corps to block the attempted encirclement.

On 14 November, 1940, at full strength and full of vigor, the Greek forces launched their major counter-attack. Having stopped the initial Italian offensive, General Papagos was unwilling to wait for enemy reinforcements (eight divisions were in the process of moving from Italy to Albania) to tip the scales back in the favor of the invaders. Instead, he launched a coordinated counter-attack along the entire front - from Lake Prespa to the Ionian Coast (6:286).

To support the counter-offensive, the EVA gave a maximum effort. The bombers of all three Combat Mira were out in force, making frequent attacks on the Koritza airfields and the one at Argyrokastron. At 0800 hours four Battles (33 Mira) raided Koritza-North, destroying a Caproni Ca.133 liaison aircraft and damaging four fighters. A mixed flight of two Battles (33 Mira) and two Blenheims (32 Mira) hit Koritza-South at 0945. The defenders were fully alerted and one Blenheim was blown out of the sky by the intense as fire. The second Blenheim and one of the Battles were riddled and severely damaged by the awaiting CR.42s of 393 Squadriglia (15:34).

Even the EVA fighters put in a heretofore rare appearance over the front lines, nine PZL P.24s of 23 Mira patrolling overhead. They were bounced by three CR.42s (393 Sqd) but avoided any losses. After regrouping they encountered another formation of CR.42s and engaged in an intense, swirling dogfight. Two CR.42s were shot down and a third damaged, its pilot wounded. Although several of the PZLs may have been lost or damaged (six were claimed "killed" by the Italians), no Greek pilots were killed or wounded during this fight and the aircraft records had long since disappeared. Elsewhere that day three of the 23 Mira P.24s intercepted and severely damaged a single 254 Squadriglia S.79 on a reconnaissance mission over the Eastern Sector (15:34).

The Italians, realizing the seriousness of the situation on their left flank, sent 96 Gruppo Auto B.a.T. Stukas to bomb Greek artillery positions and a bridge on Lake Prespa. A single Ju.87B raided the EVA's forward landing field at Florina, claiming one PZL P.24 destroyed on the ground. Four more PZLs scrambled after the attacker, but failed to catch it. During the day, 22 Mira moved closer to the front, joining 21 Mira at Kalambaka airfield, adding their weight to the forces supporting the drive on Koritza. In other action in support of that advance, a 4 Mira Potez 25A biplane was lost to ground fire while reconnoitering the front (15:35).

The intense activity continued through the next day. An early raid by five 105 Gruppo (46 Stormo) S.79s against the advancing Greek V Corps near Bilishte was countered by PZL P.24s of 22 Mira. Although one bomber was damaged, five escorting G.50s (24 Gruppo) intervened and frustrated the defenders (15:36).

An EVA raid of four Battles (33 Mira) attacked targets near Koritza and was engaged by a single CR.42, losing one member of the formation outright and a second returning severely

damaged, its observer KIA. In the same area, a Potez 633 was badly damaged by friendly as fire, its observer also killed (15:37).

Bad weather swept in again, precluding air activity for two days, but on November 18th, Greek fighters were back in the air again, the three Mire Dioxeos flying 20 sorties over the Eastern Sector. Three PZLs of 23 Mira intercepted a raid of 105 Gruppo (46 Stormo) S.79s over the Korciano area and this time they would not be denied: one of the fast trimotor bombers fell in flames. Later three more P.24s intercepted a large formation of 18 Cant Z.1007bis (47 Stormo) over the Ariza area, but without effect. The PZLs of 23 Mira also engaged another raid, this one of six Z.1007s from 4th ZAT's 50 Gruppo Autonomo B.T., downing one 211 Squadriglia aircraft (15:38).

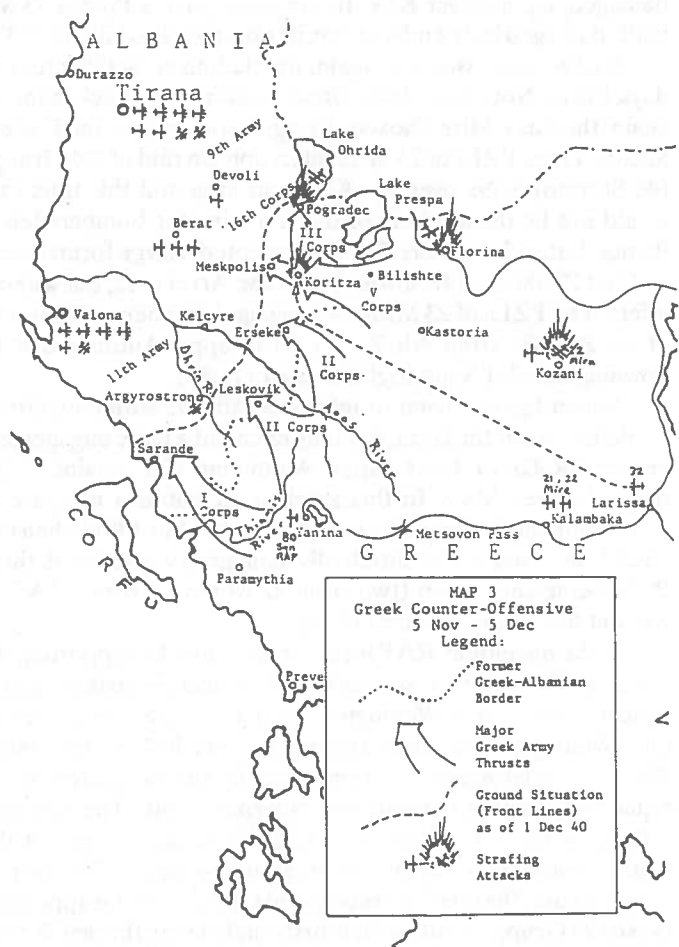
Italian fighters tried to interfere with the stiffening Greek air defense over the front, but only once did a large engagement ensue: CR.42s of 160 Gruppo Autonomo C.T. against P.24s from all three Mire. In this swirling air battle a measure of retribution for the embarrassment of November 14th (when two CR.42s were lost and a third badly damaged) was exacted: three P.24s being shot down (two from 22 Mira/one from 23 Mira) without loss to the Italians (15:38).

In the meantime, RAF forces contributed by supporting the counter-offensive with strategic and tactical air strikes against Italian targets with Wellingtons and Blenheims respectively. One Wellington and three Blenheims were lost in these raids. The RAF contingent was reinforced by the Gladiators of 80 Squadron, arriving at Eleusis on November 18th. The next day, a flight of three P.24s led nine Gladiators on a sweep of the Koritza battle area. As soon as the shorter-ranged PZLs turned back for base, the Gladiators engaged CR.42s (160 Gruppo) and G.50s (24 Gruppo) and, in their first combat with the new British arrivals, the Italian fighters lost three biplanes and one monoplane (no Gladiators shot down) (15:39).

In the center of the Greek line, II Corps pushed across the former border on the 21st, capturing Erseke and Leskovik. The powerful I Corps threw the Italian 11th Army back across the Thiamis River and pushed down the Dhrin River valley towards Argyrokastron (6:286). This advance threatened the "Regia Aeronautica" base there and the 365 Squadriglia evacuated its CR.42s to Valona, leaving the 120th Squadriglia O.A. to hold out until the last moment (15:43).

Again weather -- cold, windy, and snowy -- swept over the battlefields and aerial activity again became sporadic. Supporting V Corps, 3 Mira Henschels braved the harsh elements to execute ground attack missions against the retreating Italians. On 21 November, a three-ship formation caught a four mile long column of enemy troops exposed on a road near Pogradec and caused utter chaos with their continuous bombing and strafing attacks. The next day, 3 Mira paid for the success when an Hs.126A was caught by patrolling CR.42s (160 Gruppo) and was shot down in flames (15:40). By that day, the Greek V Corps had broken through the Italian 16th Corps at Mount Morova and drove to Koritza, capturing some 2000 troops, 80 artillery pieces and 55 anti-tank guns (6:286).

This forced the "Regia Aeronautica" to abandon its two airfields at Koritza, the 393 Squadriglia moving to the new base at Devoli and the 394th going to Berat (15:41). The 25th Squadriglia O.A. withdrew to Tirana, leaving a couple of damaged Ro.37s (photo: 15:67). Additionally, the Greeks captured a Savoia S.79 of 254 Squadriglia, the bomber damaged by 23 Mira PZLs on 14 November (photo: 15:41). This aircraft was



repainted in EVA blue/white/blue markings and impressed into Greek service.

Thus regrouped, the "Comando Aerea della Albania" briefly went back onto the offensive. On 26 November, twelve 24 Gruppo Auto C.T. G.50s (covered by 15 CR.42s from 160 Gruppo) attacked Kozani airfield strafing the Breguets of 2 Mira which was based there. Five Breguet XIXs were lost and the remaining three damaged, virtually wiping out the unit (15:43).

The next day, another 32 Mira Blenheim was lost on a raid in the Pogradec area, its crew killed (15:42). This city, located on the shore of Lake Ohrida, was the objective of the freshest Greek forces, the new III Corps, and was taken on December 4th (6:286).

Meanwhile, the RAF squadrons were heavily employed, 80 Squadron (Gladiators) was particularly busy performing escort missions, sweeps and defensive patrols from their temporary base at Yanina. In several combats, this unit was responsible for bringing down ten Italian fighters and one bomber for the loss of only one Gladiator. While 80 Squadron covered the front, the RAF 211 Squadron (more Blenheims) began to arrive at Mendiini and the EVA Fighter Command used the respite to regroup: the nine remaining PZL P.24s of 21 Mira were redistributed among the two squadrons at Kalambaka and the unit withdrew to Eleusis where it was re-equipped with 14 Gloster Gladiator Mk.IIs. These biplanes were taken directly from RAF stocks in Greece and Egypt (15:48). They were perforce delivered in their standard RAF scheme and simply had their roundels repainted. Details of the new EVA serials are

unknown. More RAF Gladiators arrived on 4 December as the leading elements of 112 Squadron joined 80 Squadron at Yanina (15:49).

The 23 Mira was up in force on 3 December, six PZLs engaging 18 CR.42s of 160 Gruppo Auto C.T. Outnumbered, the Greeks lost one P.24 in the melee, the pilot KIA (15:48). After December 5th, the Greek counter-offensive fizzled out in the icy cold. The Italian Army of Albania was reinforced to twice its original strength but these units had been committed piecemeal to plug the holes in the receding Italian lines. As the Greek forces reached the ends of the mountain ranges at Pogradec, Meskopoliso, Permet, and Sarande their natural advantage in the use of the terrain also ended. Weather as well conspired against the Greek forces, severe snowstorms, accompanied by temperatures as low as 15 - 20 degrees below zero Centigrade (6:286), swept into the Balkans! (Map 3 depicts the ground situation on 1 December, 1940.)

SOURCES

1. "Elegantly Obsolete - the Fairey Battle", AIR INTERNATIONAL, Vol 20/#3, March 1981.
2. "Epitome of an Era -- the RAF's Last Fighting Biplane", AIR INTERNATIONAL, Vol 4/#3, March 1973.
3. "Fiat BR.20 -- Stork's a' la Mode", AIR INTERNATIONAL, Vol 22/#6, June 1982.
4. "Fighter A to Z -- Gloster Mars VI Nighthawk", AIR INTERNATIONAL Vol 18/#6, June 1980.
5. "Hellenic Air Force", NATO's SIXTEEN NATIONS", Special Issue 1987; Vol 32.
6. "Illustrated World War Two Encyclopedia", ed: Peter Young, (USA: H.S. Struttman, Inc., 1978).
7. "Illustrated Encyclopedia of Aviation", ed: Anthony Robinson, (New York: Marshall Cavendish Corp, 1979).
8. "Jane's All the Worlds Aircraft: 1941", ed: Leonard Bridgeman, (New York: The MacMillan Co., 1942).
9. "Jane's Encyclopedia of Aviation", ed: Michael J.H. Taylor, (Danbury, Connecticut: Grolier Education Corp, 1980).
10. "Last Belligerent Biplane -- Avia B.534", AIR INTERNATIONAL, Vol 7/#1, July 1974.
11. "Bloch's Fighters -- the Contentious Combatants", AIR INTERNATIONAL, Vol 14/#4, April 1978.
12. Munson, "Bombers Between the Wars: 1919-1939", (New York: The MacMillan Co., 1970).
13. Munson, "Fighters, Attack and Training Aircraft: 1939-1940", (New York: The MacMillan Co., 1969).
14. "Second String Arrow -- The Fiat G.50", AIR INTERNATIONAL Vol 34/#6, June 1988.
15. Shores, "Air War for Yugoslavia Greece and Crete", (Carrollton, Texas: Squadron Signal Publications, 1987).
16. Shores, "Regia Aeronautica", (Warren, Michigan: Squadron/Signal Publications, 1976).
17. "Sprightly Saetta", AIR INTERNATIONAL, Vol 13/#6, December 1977.
18. Taylor, "Encyclopedia of the World's Air Forces", (Wellingborough, England: Patrick Stephens Ltd, 1988).
19. "S.M.81 Tailpiece", (letter) AIR INTERNATIONAL, Vol 2/#2, February 1972.
20. Weale, Weale, & Barker, "Combat Aircraft of World War Two", (London: Bracken Books, 1977).

Doug Dildy (SAFCH #844), PSC 1 Box 675, APO NY 09292.

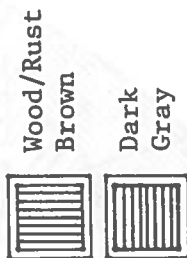
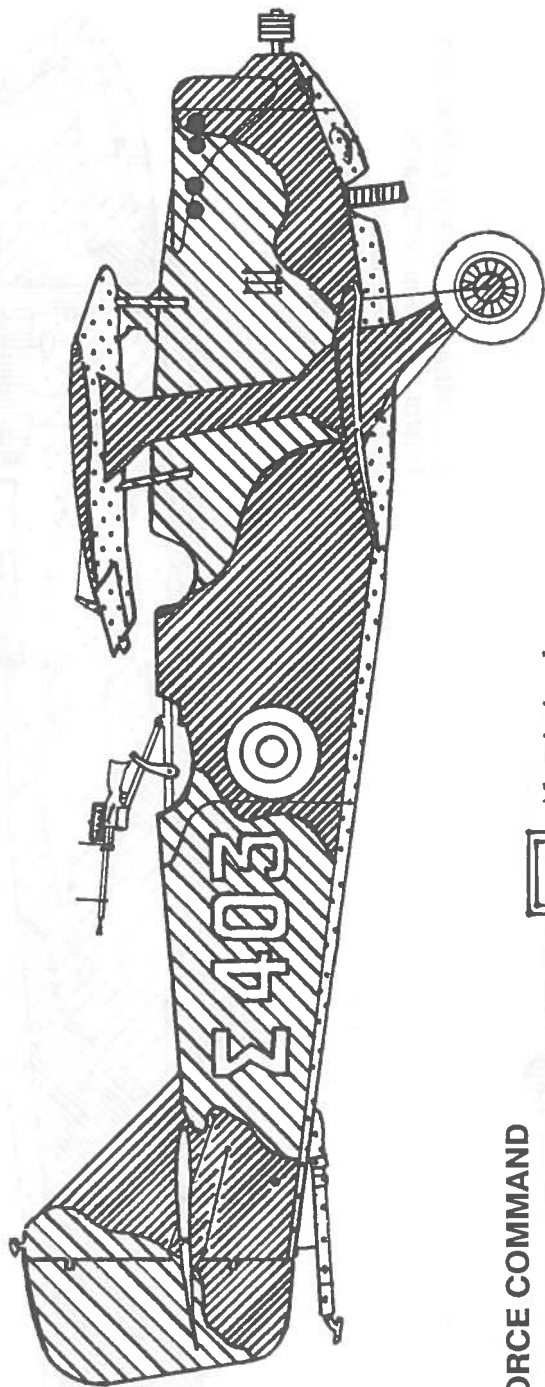
1. ARMY HIGHER AIR FORCE COMMAND

Breguet XIX A.2 "Sigma-403"

2. Mira Stratiotikis Synergassias

Kozani Airfield; late 1940

Source: photo, AWTGC, pg 12



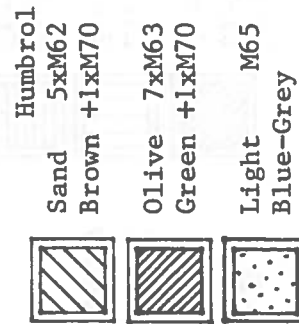
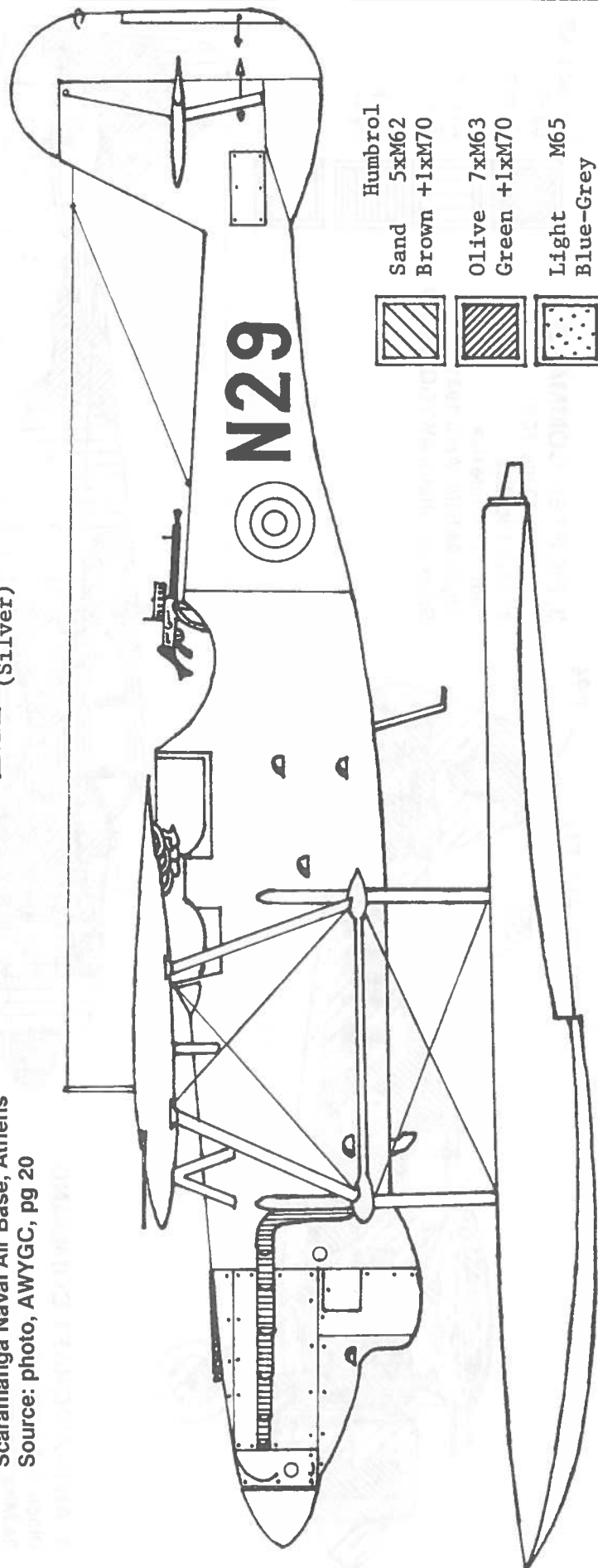
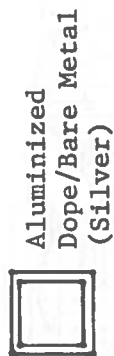
2. NAVY HIGHER AIR FORCE COMMAND

Dornier Do.22Kg "Nu-29"

12. Mira Nafitikis Synergassias

Scaramanga Naval Air Base, Athens

Source: photo, AWYGC, pg 20



French AF

Dark
Green

Light
Brown

Dark
Gray

Light
Gray

3. FIGHTER COMMAND

PZL p.24A "Delta-102"

23.Mira Dioxeos

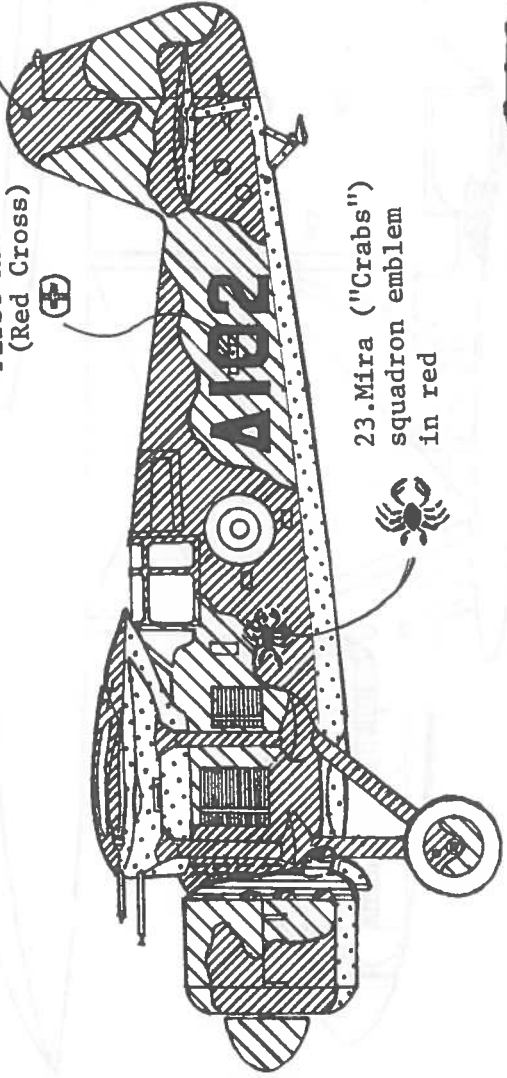
Pilot: Lt Mitrallexisa

Argos Airfield: April 1941

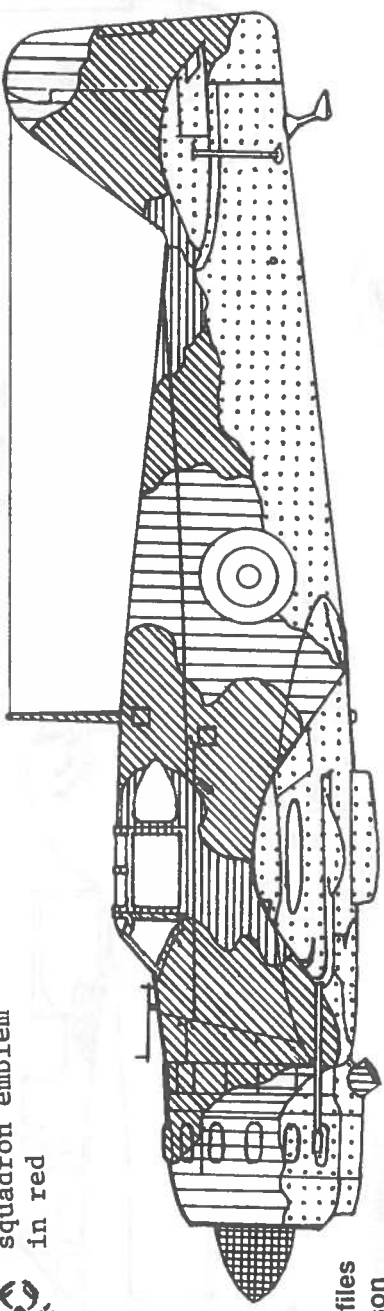
Sources: photo. AWYGC, pg 387

P-24

First Aid Kit
(Red Cross)



23.Mira ("Crabs")
squadron emblem
in red



4. ANTI-AIRCRAFT COMMAND

Bloch 151 Serial unknown

24.Mira Dioxeos

Eleusis Airfield, Athens, 1940

Note: camouflage pattern selected from profiles in AI depicting French MB.152 by comparison with photos in AWYGC, pg 69.

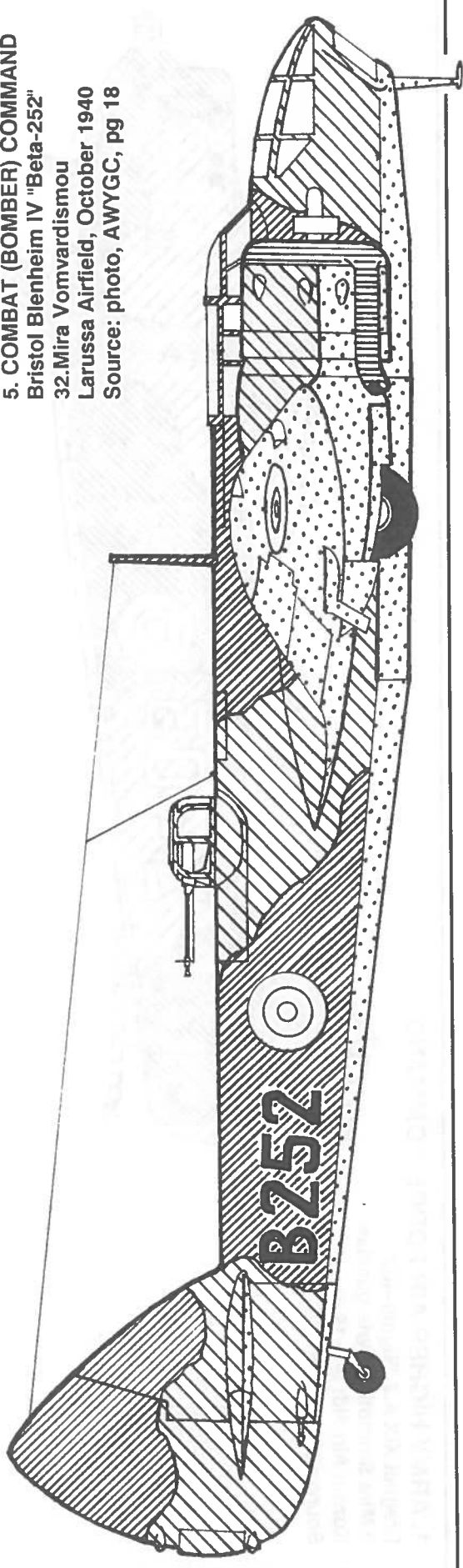
5. COMBAT (BOMBER) COMMAND

Bristol Blenheim IV "Beta-252"

32.Mira Vomvardismou

Larussa Airfield, October 1940

Source: photo, AWYGC, pg 18



APPENDIX ONE **Elleniki Vassiliki Aeroporia** **Air Order of Battle** **28 October 1940**

Army Higher Air Force Command		
1 Mira Stratiotkis Synergassias	9 Bre.XIX	Kozani
2 Mira Stratiotkis Synergassias	9 Bre.XIX	
3 Mira Stratiotkis Synergassias	15 Hs.126A-1	
4 Mira Stratiotkis Synergassias	17 Potez25A	
Navy Higher Air Force Command		
11 Mira Naftikis Synergassias	9 Fairey IIIF	Valtoudi
12 Mira Naftikis Synergassias	12 Do.22Kg	Scaramanga
13 Mira Naftikis Synergassias	9 Anson Mk.I	Scaramanga
Fighter Command		
21 Mira Dioxeos	12 PZL P.24	Kalambaka
22 Mira Dioxeos	12 PZL P.24	Salonika
23 Mira Dioxeos	12 PZL P.24	Larissa
Anti-Aircraft Command		
24 Mira Dioxeos	9 Bloch 151	Eleusis
Combat (Bomber) Command		
31 Mira Vomvardismou	11 Potez 63	Niamata
32 Mira Vomvardismou	12 Blenheim IV	Larissa
33 Mira Vomvardismou	12 Battle I	Kouklaina

254 Sq	8 S.79	Tirana
255 Sq	8 S.79	Tirana
160 Gruppo Auto C.T. Drenowa		
393 Sq	10 CR.42	Koritza
394 Sq	14 CR.32	Koritza
395 Sq	11 G.50	Berat

4th Zona Aeronautica Territoriale (ZAT) Bari			
35 Stormo B.M. Brindisi			
86 Gruppo Brindisi			
	190 Sq	6 Z.506B	Brindisi
	191 Sq	6 Z.506B	Brindisi
95 Gruppo Brindisi			
	230 Sq	6 Z.506B	Brindisi
	231 Sq	5 Z.506B	Brindisi
37 Stormo B.T. Lecce			
55 Gruppo Lecce			
	220 Sq	9 S.81	Lecce
	221 Sq	9 S.81	Lecce
116 Gruppo Lecce			
	276 Sq	9 BR.20	Lecce
	277 Sq	10 BR.20	Lecce
47 Stormo B.T. Grottaglie			
106 Gruppo Grottaglie			
	260 Sq	7 Z.1007	Grottaglie
	261 Sq	7 Z.1007	Grottaglie
107 Gruppo Grottaglie			
	262 Sq	7 Z.1007	Grottaglie
	263 Sq	7 Z.1007	Grottaglie
50 Gruppo Auto B.T. Brindisi			
	210 Sq	8 Z.1007	Brindisi
	211 Sq	8 Z.1007	Brindisi
96 Gruppo Auto B.a.T. Lecce			
	236 Sq	10 Ju.87B	Lecce
	237 Sq	10 Ju.87B	Lecce
2 Gruppo Auto C.T. Grottaglie			
	150 Sq	15 G.50	Grottaglie
	151 Sq	15 G.50	Grottaglie
	152 Sq	12 G.50/CR.32 (Note: This unit for the air defense of southern Italy only)	

SOURCE: "Air War for Yugoslavia, Greece, and Crete" by Christopher Shores and Brian Cull, Squadron/Signal Publications, 1987: pg 27.

APPENDIX TWO **Regia Aeronautica** **Air Order of Battle** **28 October 1940**

Comando Aerea Albania, Tirana		
38 Stormo B.T. Valona		
39 Gruppo Valona		
51 Sq	6 S.81	Valona
69 Sq	6 S.81	Valona
40 Gruppo Valona		
202 Sq	6 S.81	Valona
203 Sq	6 S.81	Valona
72 Gruppo Auto O.A. Argyrokastron		
25 Sq	9 Ro.37	Koritza
42 Sq	8 Ro.37	Valona
120 Sq	8 Ro.37	Tirana
105 Gruppo Auto B.T. Tirana		

ABBREVIATIONS:

Auto	Autonomo = Separate (autonomous) Unit
B.a.T.	Bombardamento a Tuffatori = Bomber by Diving
B.M.	Bombardamento Marittimo = Bomber, Sea-Based
B.T.	Bombardamento Terreste = Bomber, Land-Based
C.T.	Caccia Terreste = Pursuit (fighter), Land-Based
O.A.	Osservazione Aerea = Observation by Air

SOURCE: "Air War for Yugoslavia, Greece, and Crete", by Christopher Shores and Brian Cull, pages 22 - 25

-accessories-accessories-accessories-accessories-accessories-accessories-accessories-accessories-accessories-accessories-

MiG-21MF Photo-Etched Detail Set, 1/72 scale. Designed by KP for their 1/72-scale kit of the MiG-21MF, this set consists of instructions and a 6.2 cm by 4.5 cm photo-etched plate. The plate contained 18 parts such as the instrument panel, gun sight, speed-brake details, jet-pipe details, IFF aerals, etc. While designed for the MF, most of the parts are applicable to the PFM, SMT, and bis variants, and some can be used on the F and PF. Daniel Petz (SAFCH #623), Na Ladvi 21, 18200 Praha 8, Czechoslovakia. [Editor's note: This sheet not as exquisitely etched as the Eduard parts and does not include a plastic instrument faces as does the Eduard sheet. However, it is every bit as good, if not better, than its

Western counterparts, and it is highly recommended (particularly if bought from the SAFCH Sales Service). Labeled as #1, I am looking forward to similar sets for other KP kits.]

Rubber Wheels and Navigation Light Set, 1/72-scale accessories.

"A small group of Russian modelers in Vitebsk are making some interesting accessories in 1/72 scale. For a couple of years I have been selling their rubber wheels here in Finland. The wheels have detailed plastic hubs and real rubber tires. If you look at the tires under a magnifying glass you can see the text: GOODYEAR and the tire size. It's really amazing! Their newest product is a navigation light set. Three

types of lights are provided in three colors (transparent red, green, and clear) for a total of 36 lights. Each light is on a circular mounting rod; just cut the molded light off the kit, drill a hole, and insert the new light."

Tapio Huttunen (SAFCH #1169), Haukantie 22, 45740 Kuusankoski, Finland.

[Editor's note: Tapio sent three sets of wheels (Sopwith Triplane, P-39, & MiG-15) and the navigational light set for review. They are every bit as good as he indicates. If you are interested in these either contact Tapio or you might want to write directly to the address on the instruction sheet: Hobby + Plus, Post Box 2, Vitebsk, USSR.]

THE ROYAL HELLENIC AIR FORCE IN 1940

Elias Korobilis

[Editor's note: This article first appeared in NEA, the magazine of IPMS-Greece, and is reprinted here with the gracious permission of their editor.]

Every historian looking back to the 1940-period of Greek military history will be confronted with darkness. Besides the official history of the Air Ministry and a few articles that have been published, there has not been a serious approach to this subject, especially from the modeler's point of view. The reason for this is that, until now, most of the information came from reminiscences and not from archives or squadron logbooks. After so many years, how is it possible for someone to remember accurately a camouflage schemes or the positions of the roundels? Written documents can help, but do they exist? We don't know. Were they destroyed during the German invasion, or were they hidden and are they now in hands that do not realize their importance?

The most important published source of information on the RHAF in 1940 is "Air War over Yugoslavia, Greece, and Crete", by Shores and Malizia. These two authors have cross-referenced material from German, Italian, and British archives and their book provides a good overview of the war in the Balkans (albeit from the British viewpoint).

Another source is photographs. Because few people had cameras and because of the the anti-espionage mania of authorities, the photos that exist are few and of poor quality. Another trap for the historian is the existence of many counterfeit photos that have appeared in magazines, etc. Photos of aircraft with altered and overpainted roundels and other details is an easy solution when there are no photos of genuine Greek aircraft.

Before the outbreak of war, the RHAF tried to get ready. The aircraft were camouflaged, new orders were made, and the squadrons were dispersed to forward airfields. There were four Commands: Pursuit (aircraft coded "delta"); Bomber (coded "beta"); Army Cooperation (coded "sigma"); and Naval (coded "nu").

After the fall of Crete, 13 Squadron flew to North Africa with its Avro Ansons and 4 to 5 Avro Tutors.

Potez 25: Photos exist from the pre-war period. They were probably painted green/light earth. Codes were "sigma" 1 to 17.
Potez 633: Only two photos exist. The camouflage seems to be three colors but of unknown scheme and shades. We know one code - "beta" 229.

Avro 626: No photos exist from the winter 1940-41. They were possibly camouflaged.

Hawker Horsley: They were probably grounded.

Avia B-534: Complete darkness!

Blenheim I: They probably retained their British scheme. It is unknown if they carried Greek code numbers. Four of the six Blenheims provided by the British were s/n L6658, L6670, L8384, L8385.

Gladiators: They retained their British scheme, but were possibly given Greek code numbers. We know of one: "delta" 193. Fourteen of the Gladiators used by the 21st Squadron were s/n K8013, K8018, K8031, K8047, K8554, K7609, K7892, K7923, K7973, K8017, K6135, L7611, L7623, L8011.

Junkers Ju-24G and Ju-52: These were painted green/light earth, but it is unknown if they carried code numbers and the position of any roundels is unknown.

Photo Captions: page 104 (all photos via IPMS-Greece):

- Potex 633. It still remains a mystery!
- Hs 126. Note aiming lines on the fuselage. Code is black 'sigma-37'. Photos of 'sigma-39' show a white code.
- A Dornier Do-22.
- Fairey Battle code "beta"-282. Roundels and code seem to be on the underside of the wing as well.
- Blenheim MkIV code "beta"-261.



A PZL P-24F in camouflage scheme. Positions and types of roundels differed from aircraft to aircraft. Code number is "delta"-129. The canopy seems to have a small sliding window. How did the pilot enter the cockpit? Did the canopy open or was there a door. Any information would be appreciated.

-decals-decals-decals-decals-decals-decals-decals-decals-decals-decals-decals-decals-decals-decals-decals-decals-

MiG-21MF, 1/72-scale decals from MPM Czechoslovakia.

This sheet was an update, and extension, of their previous sheet for the sharkmouth Czech MiG-21MF. This sheet includes markings for a Bangladesh AF Fishbed, serial 7201 in an overall silver color scheme. This sheet is available from the SAFCH Sales Service.

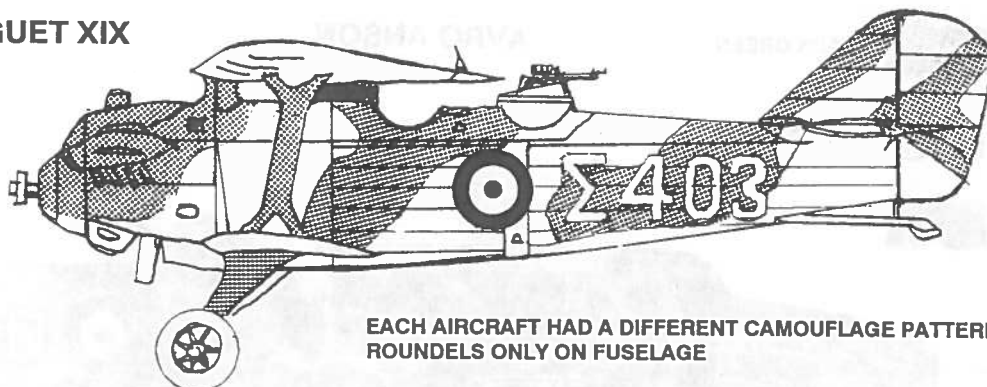
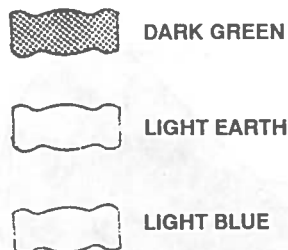
Daniel Petz (SAFCH #623), Na Ladvi 21, 18200 Praha 8, Czechoslovakia.

Avia B-534, 1/72-scale decals from Delta Hobby Czechoslovakia.

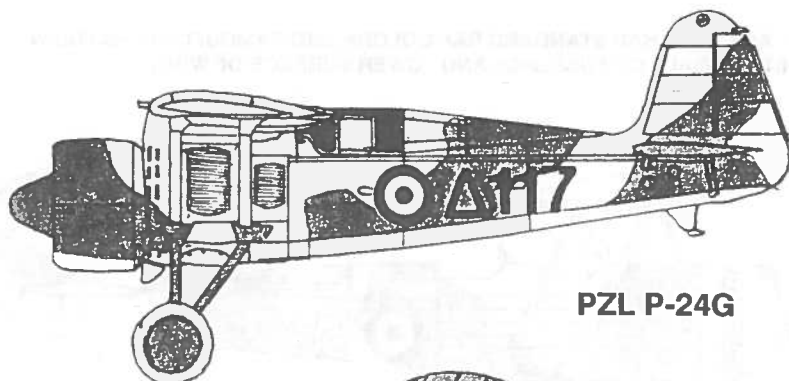
This 12.7 cm by 9.5 cm sheet contains markings for two unusual schemes for Czechoslovakia's best-known pre-WWII fighter: (1) An aircraft captured

by the German Luftwaffe; it is serialized yellow '6' and camouflaged green 76 over blue 65. (2) An aircraft used by the Slovak AF on the Eastern Front. The color scheme is the same as for (1) but with white serial 'M-4' and yellow wing tips. Daniel Petz (SAFCH #623), Na Ladvi 21, 18200 Praha 8, Czechoslovakia.

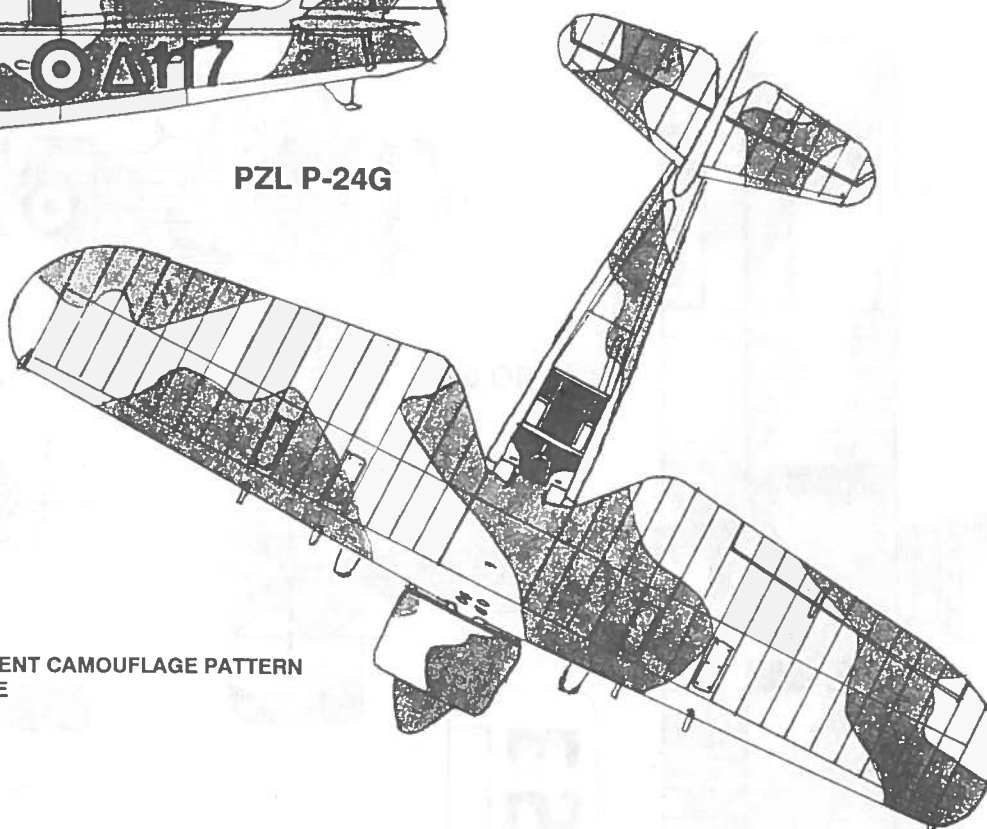
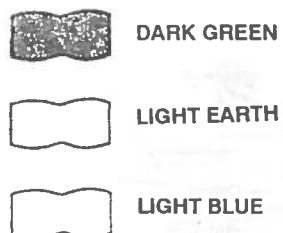
BREGUET XIX



EACH AIRCRAFT HAD A DIFFERENT CAMOUFLAGE PATTERN
ROUNDELS ONLY ON FUSELAGE



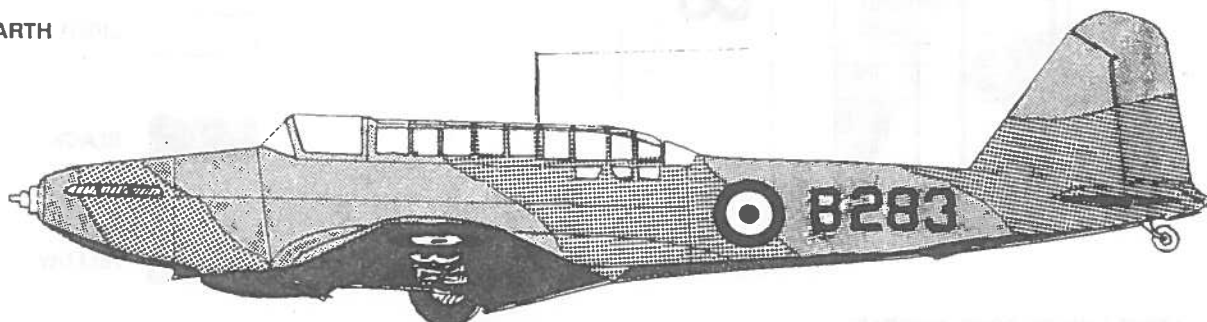
PZL P-24G



EACH AIRCRAFT HAD A DIFFERENT CAMOUFLAGE PATTERN
ROUNDELS ONLY ON FUSELAGE



FAIREY BATTLE



Σχέδια: Η. Κορομπίλης
Drawings by E. Korobilis

STANDARD RAF CAMOUFLAGE PATTERN AND COLORS
ROUNDELS AND WHITE SERIALS ON LOWER SURFACE OF WINGS



DARK GREEN

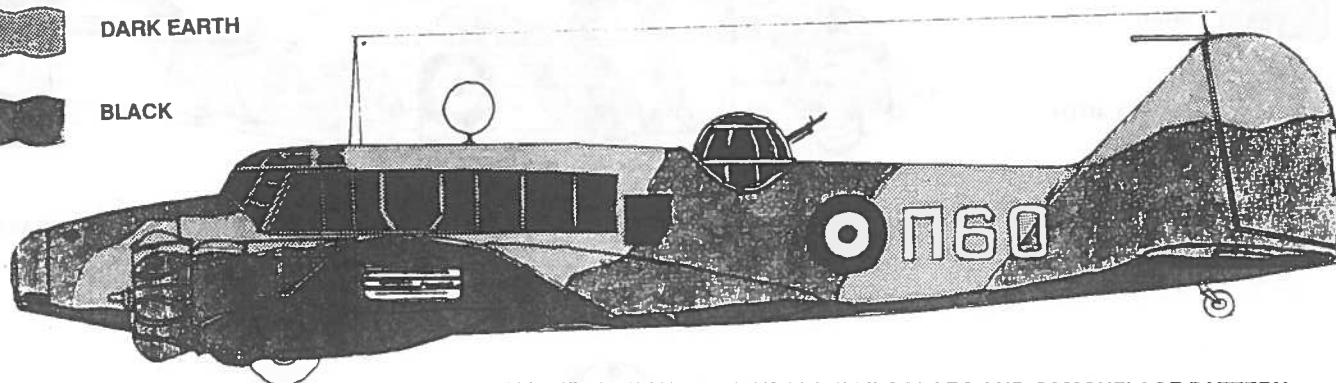
AVRO ANSON



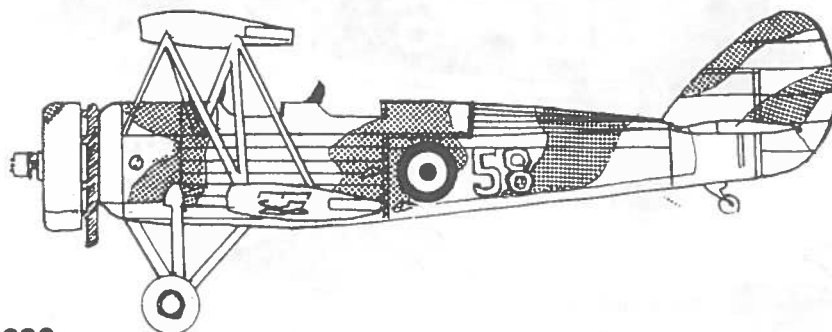
DARK EARTH



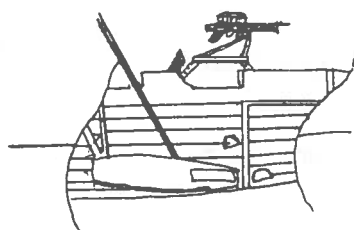
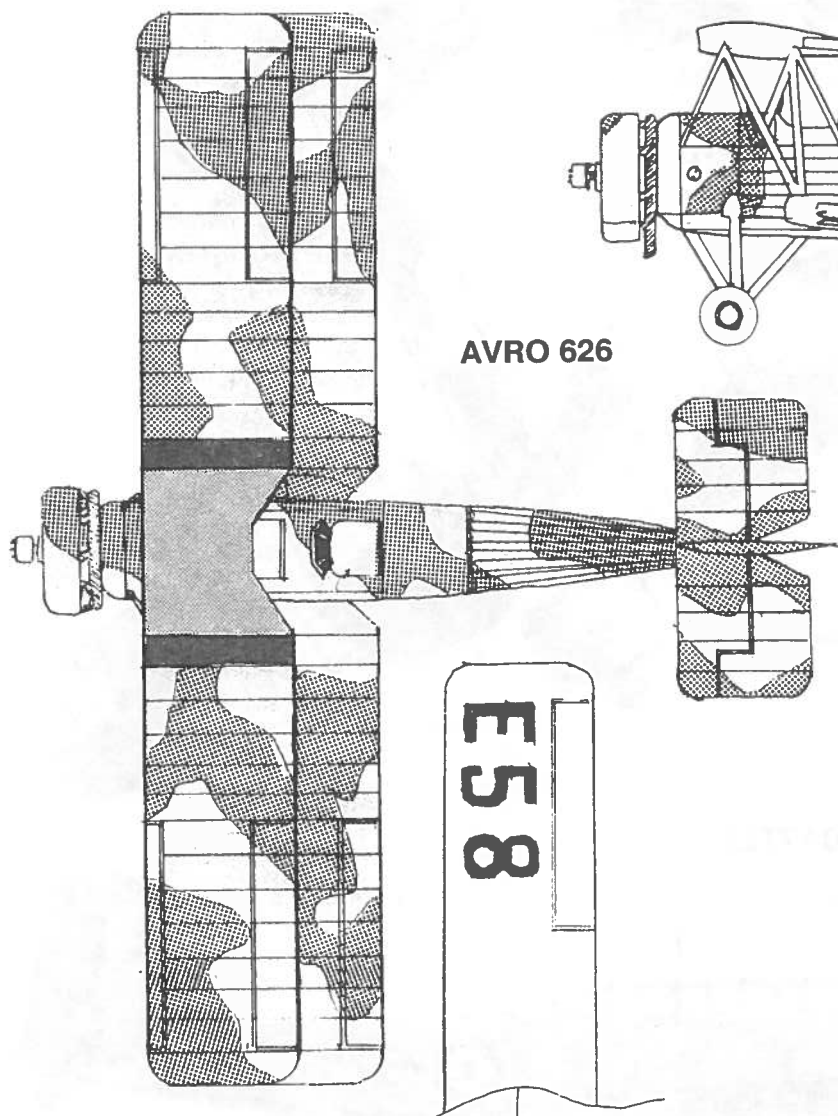
BLACK



ALL AIRCRAFT HAD STANDARD RAF COLORS AND CAMOUFLAGE PATTERN
WHITE SERIALS ON FUSELAGE AND LOWER SURFACE OF WING



AVRO 626



DARK GREEN



LIGHT EARTH



LIGHT BLUE



BLACK

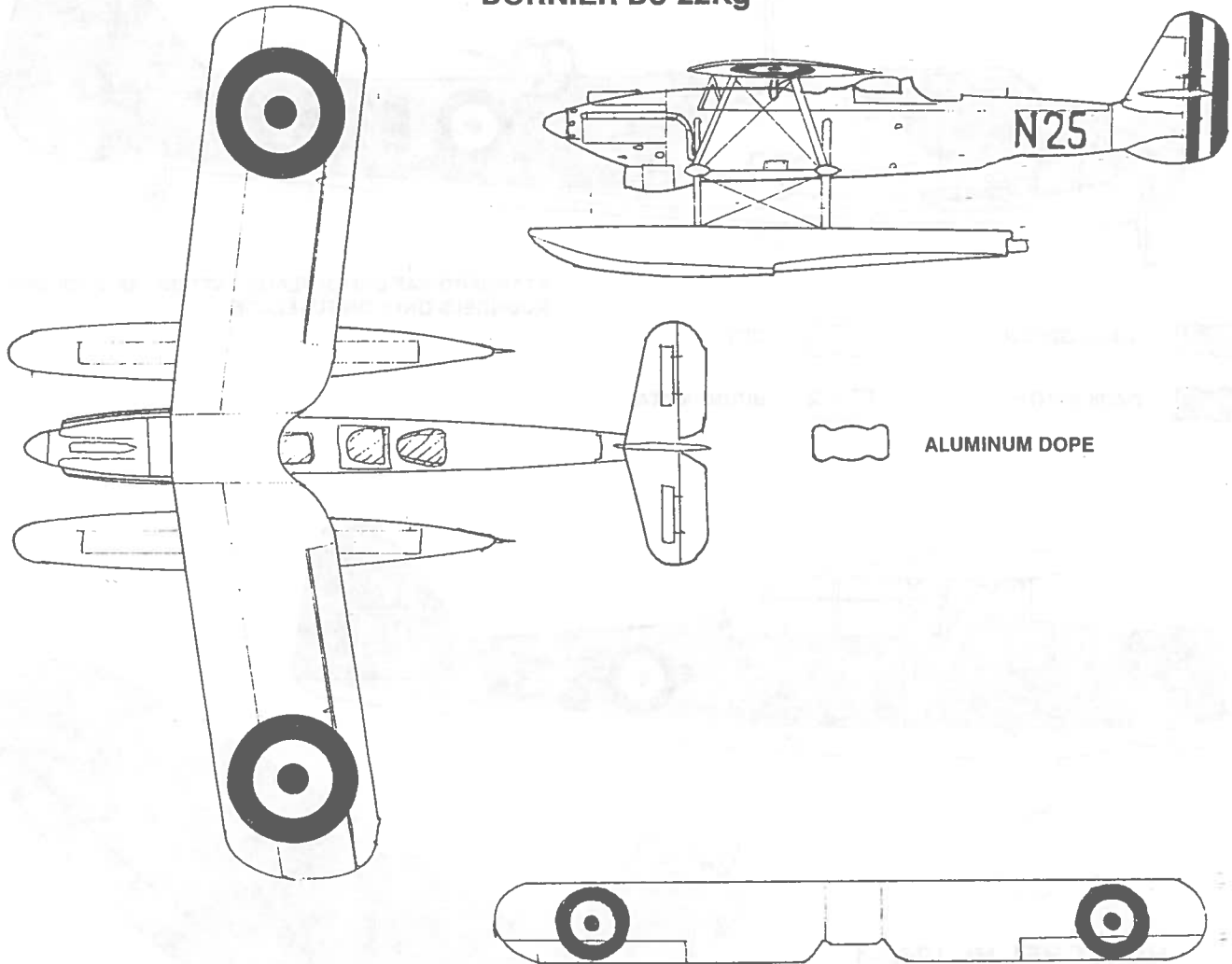


YELLOW

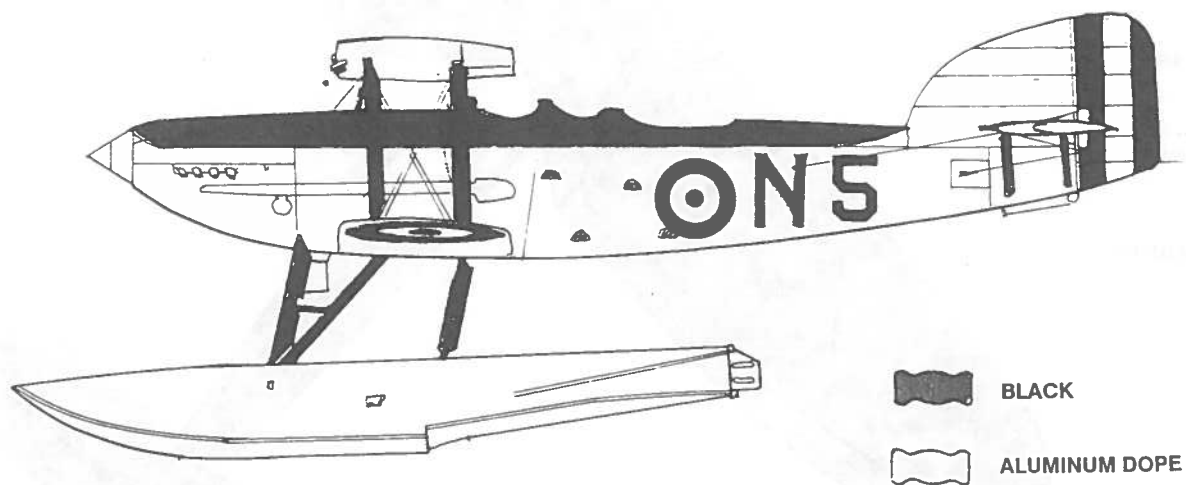
LEWIS GUN ON SOME AIRCRAFT
WING LOWER SIDE (BLACK SERIALS)
EACH AIRCRAFT HAD A DIFFERENT CAMOUFLAGE PATTERN
WHITE SERIALS ON FUSELAGE

Σχέδια: Η. Κορομπίλης
Drawings by: E. Korobilis

DORNIER Do-22Kg

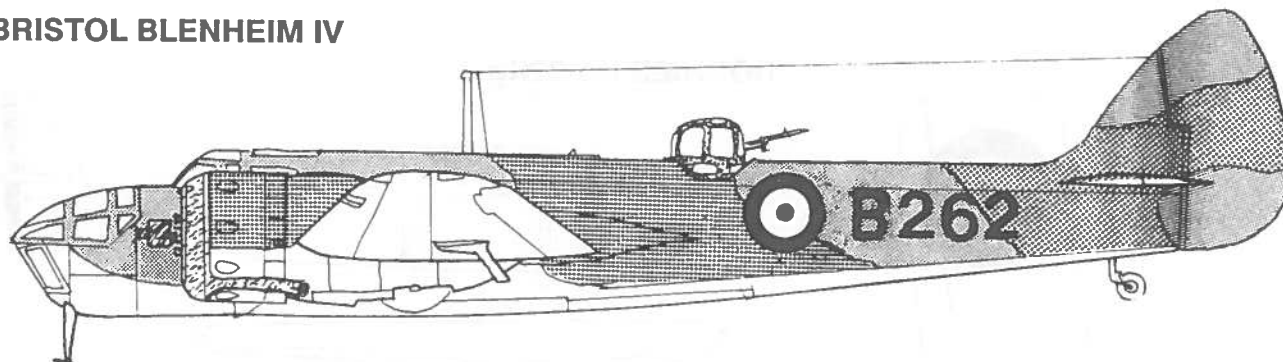


FAIREY IIIIF



Drawings by: E. Korobilis

BRISTOL BLENHEIM IV



DARK GREEN



SKY

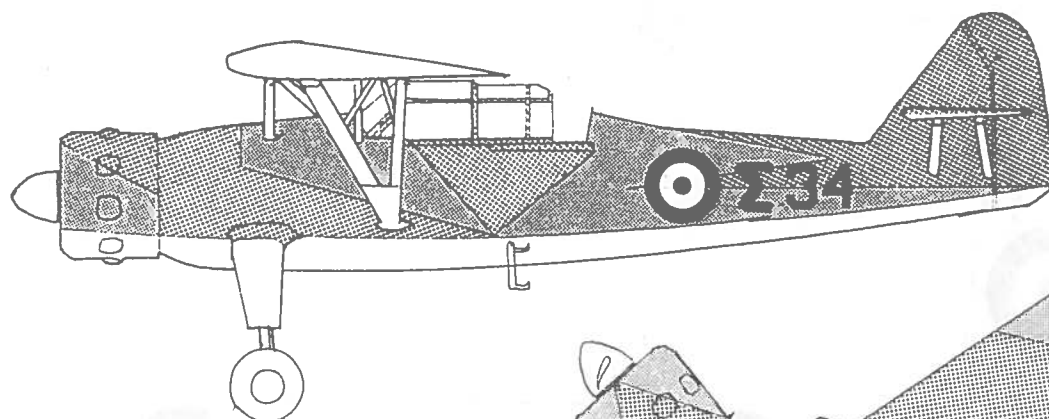


DARK EARTH



BURNT METAL

STANDARD RAF CAMOUFLAGE PATTERN AND COLORS
ROUNDELS ONLY ON FUSELAGE



HENSCHEL Hs-126A-1



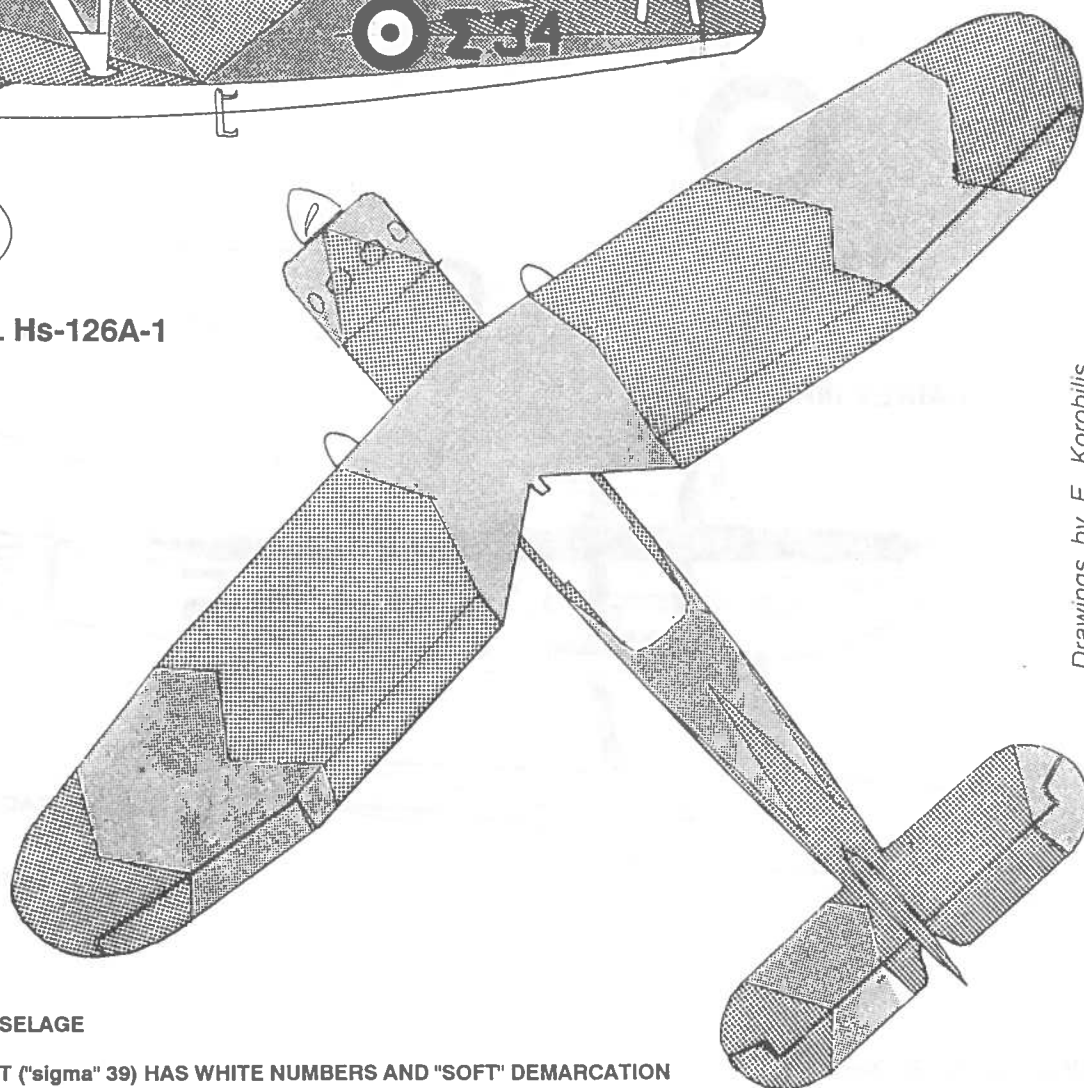
DARK GREEN



LIGHT EARTH



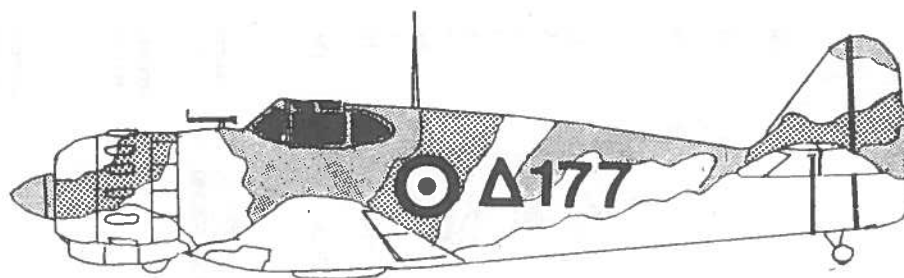
BLUE 65



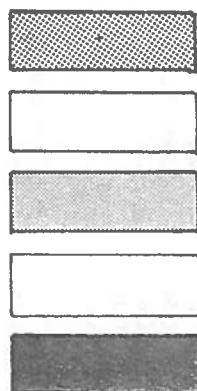
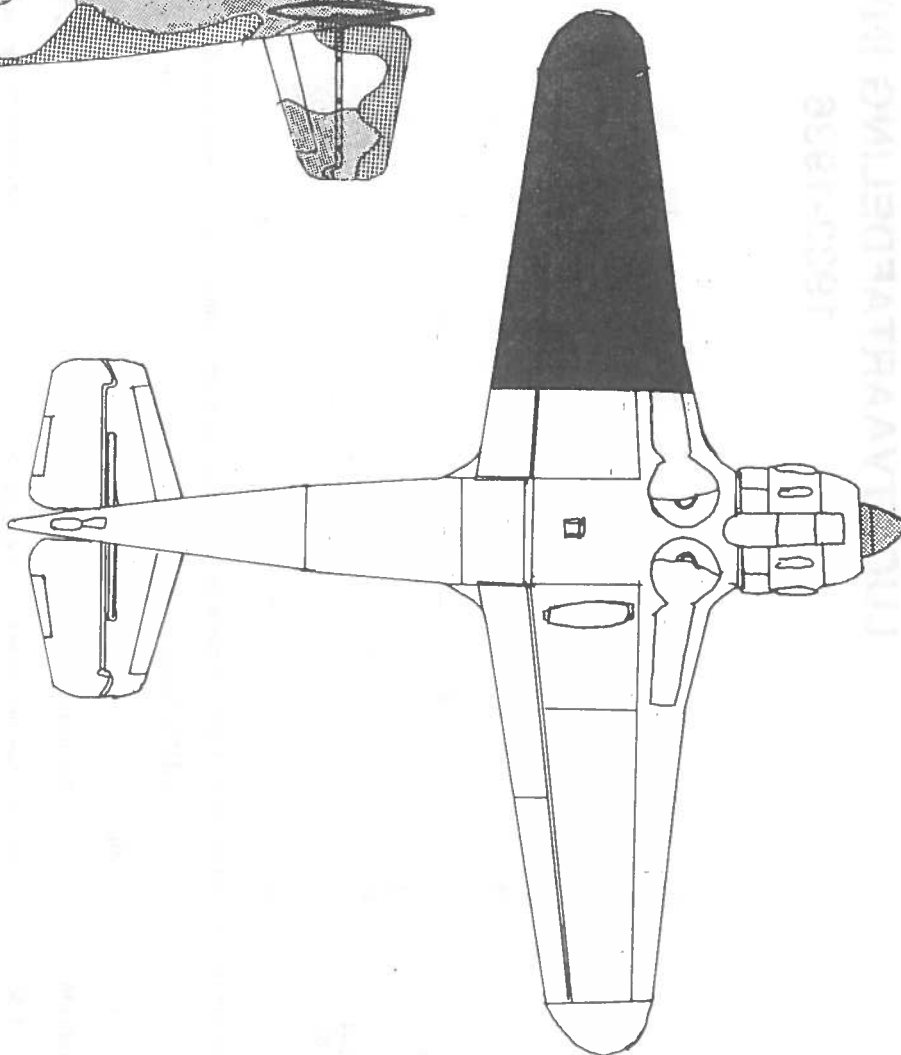
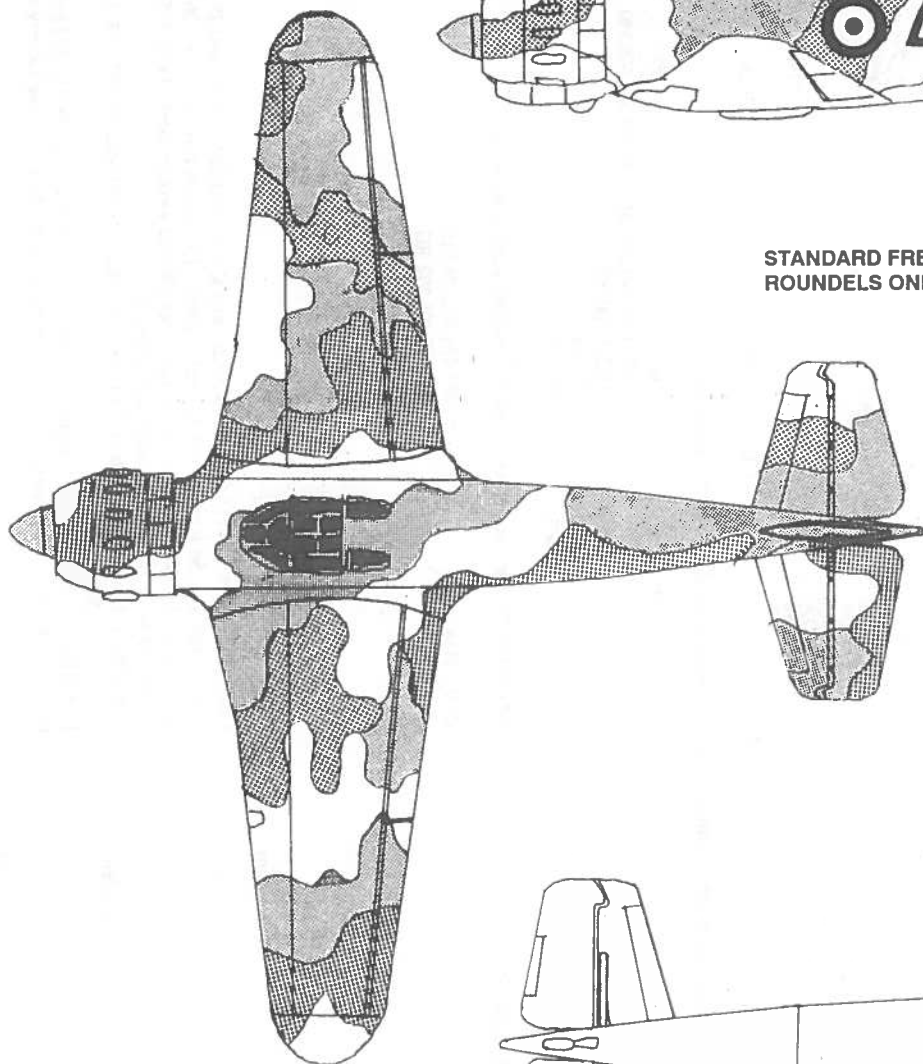
ROUNDELS ONLY ON FUSELAGE
SPINNER: RLM 02 GREY
AT LEAST ONE AIRCRAFT ("sigma" 39) HAS WHITE NUMBERS AND "SOFT" DEMARCATION

Drawings by E. Korobilis

BLOCH MB.152



**STANDARD FRENCH AIR FORCE CAMOUFLAGE
ROUNDELS ONLY ON FUSELAGE**



CHOCOLATE

BLUE GREY

KHAKI

LIGHT GREY

BLACK

Drawings by: E. Korobilis

LUCHTVAARTAFDELING INVENTORY 1933-1936

Type	1932	1933	1934	1935	1936
Fokker C.I	44	-1	43	-3	40
" C.4	21		21		21
" C.5d	30	-3	27		27
" C.6	29	-1	28		28
" C.8	1		1		1
" C.9	5		5		5
" C.10					
" D.VII	10		10		10
" D.16	12		13		13
" D.17			10		10
" F.7a/3m	3		3		3
" S.2	6		6		6
" S.4	25	-1	24		23
Koolhoven FK-49					
" FK-51					
Total	186	+8	+8	+5	+5

Positive number are aircraft taken on charge, negative numbers are aircraft deleted, number without a sign are aircraft on charge on 31 December.

ADDITIONS

1933	Fokker D.17	201-208	Fokker C.I	509	retired
1934	Fokker D.16	276,279,283 (replacements, serials reused)	" C.4	551,555,558-560,562,567-570,574,577,578,580	"
1935	Fokker C.5d	645-649 + two built from spares (in range 590-641))	" D.VII	256,258,260,266	accident
	" C.10	700-703	" D.16	276,288	retired
	Koolhoven FK-49	950	" S.2	85,91,93,97	

NB: Serial 276 was used three times; 279 and 283 were used twice.

1936	Fokker C.10	704-719	1936 Fokker C.I	487,496,500,506,516	accident
	Koolhoven FK-51	1-10		488,491,495,502,505,	retired
				518,527,541-543	"
			" C.4	566	accident
			" C.5d	564,575	retired
			" D.VII	616,633,640	accident
			" D.17	270	retired
				201	accident

WRITTEN OFF

1933	Fokker C.I	498	accident
	" C.5d	304,325,326	"
	" C.6	612	"
	" D.16	283	"
	" S.4	119	"
1934	Fokker C.I	490,533,540	accident
	" D.16	284	"
	" S.4	121	"
1935	Fokker C.I	489,524,529	accident

During 1933-1936, the C.5d (serials 301-326) and C.6 (serials 590-622), 22 and 28 aircraft respectively, were rebuilt as C.5d RR with RR Kestrel engines. The planes form the series 301-326 were reserIALIZED in the series 590-641. Some serials in the series 590-622 were re-used. Two C.5d were built from spares and were given serials in the series 590-641.

FOKKER C.I: Aircraft rebuilt as C.I Lynx were: 485, 489,490, 492,495-497, 503, 514, 516, 521, 526, 529, 530, 533-536, 538, 545, 549.

FOKKER C.4: While the C.6 were being rebuilt as C.5d RR, a number of 350 hp Hispano engines became available. These were used to re-engine some of the C.4 whose Liberty engines could now be written off.

F. Gerdessen (SAFCH #12), Fijscheerderstraat 12, 4204 ES Gorinchem, THE NETHERLANDS

"I have some information that may help answer John MacGregor's question in SAFO #58 on those 'Cambodian' A-1s. The four aircraft John mentioned as being 'derelict' at Long Beach were in storage for the noted Warbird collector, Dave Tallichet, in 1979. According to John Chapman and Geoff Goodall, authors of "Warbirds Worldwide Directory" (published in November 1989), Tallichet obtained all four aircraft from Thailand, and all are ex-Republic of Viet Nam Air Force (VNAF) aircraft. Tallichet apparently planned to recondition these aircraft and sell them as Warbirds. However, the US Federal Aviation Administration refused to allow the aircraft to be registered or flown in the US and, consequently, their market value was considerably diminished. Subsequently, at least two have gone to aviation museums -- Bu No 135332 to the National Air & Space Museum (NASM) in trade for a C-123K and Bu No 139606 to the Donald Douglas Museum. According to the "Warbirds Worldwide Directory", the remaining two aircraft still belong to Dave Tallichet/Yesterday's Air Force.

"My records show that the four A-1s John mentioned are among the 100 plus VNAF aircraft of all types known to have escaped to Thailand when the Republic of Viet Nam fell in April 1975. [Bob Mikesch, recently retired as a NASM curator, told me that NASM established that their A-1H carried the code 'FFA' and had been assigned to the VNAF's 514th Fighter Squadron of the 33rd Tactical Wing (dual based at Tan Son Nhut and Bien Hoa Air Bases).] A number of former VNAF aircraft were transferred to the Royal Thai Air Force (RTAF), including the A-1s in questions. I can't confirm the designation of the RTAF unit that operated them; however, I have some undocumented notes that indicate they were assigned to 6 Squadron. During the A-1s short 'tour' in the RTAF, they carried the same unit marking John described on the upper portion of the vertical fin -- a striking cobra on a white triangle. The RTAF curtailed their A-1 operations for the same reasons the VNAF had earlier curtailed theirs -- the high cost of maintaining the aircraft and the difficulties of obtaining spare parts.

"I am not an expert on Thai-Khmer diplomatic history, but, given the very 'strained' relations that have existed between Thailand and Cambodia since long before 1975 (when we know the four aircraft were in Thailand), it seems unlikely that the Thais would have sold or transferred any war material to the Cambodian government. Based on the evidence (some of it purely circumstantial), I don't see a 'Cambodian' connection for these A-1s -- it seems unlikely that Cambodia operated any other variants of the Skyraider than the AD-4s they received from France in the 1960s. I'm willing to be persuaded if someone has more information." Bob Mills (SAFCH #139), 2413 South 9th St., Arlington, VA 22204-2302.

"Information on new national markings for eastern European air forces is slowly becoming available. A photo of the Zlin 43 of the Hungarian AF appeared in AIR INTERNATIONAL Vol.41 No.1, where it is said that the chevron markings have been in use since 31 March 1991. AIR ACTION #27 says a Hungarian Mi-8 carried the chevrons in November 1990 during a strike in Budapest by taxi drivers over increased fuel prices.

"AIR ACTION #27 also contains an article on the Bophuthatswana AF with color photos of Pilatus PC-6 & PC-7, CASA 212, Alouette III, and MBB

Kawasaki BK-117. I would like to build a model of one of these aircraft, but I don't know what to do about the national insignia. Perhaps one of our SAFCH members could advise me of how to surmount this difficulty."

Calsyn Frans (SAFCH #854), Oude Staatsbaan 21, B-9991 Maldegem, Belgium.

"Regarding the winner of the SAFCH Kit Survey: I've just seen the Fokker C.Ve from Airmodel and I'm not fully satisfied; both the wings and the fuselage are devoid of fabric details and it is impossible to build the Dutch version used in 1940.

"Nearly all the other kits mentioned in the results are available in resin at 1/72: Potez 25 (Replica); Breguet 19 (Replica); Fokker G-1 (WK-Model); Ro-37 (Replica); FFVSJ.22 (Replica). Replica also makes the following 1/72 resin kits: Latecoere 298, Loire 130, Loire Nieuport 411, Loire 210, Besoon 477, Spad 510, Breguet 27, Potez 39, Koolhoven FK.58, Amiot 351/354, Dornier Do-23, LeO C.30, Breguet "Bizerte" (vacuform), and Tupolev SB-2 (vacuform in 1/48).

"I am currently working for Replica on a 1/72 resin Latecoere 290 twin-float torpedo bomber and I will soon start the Potez 452 flying boat. They will also issue the Latecoere 302 and Breguet 521/523 flying boats (vacuform). Replica kits are distributed by: Hobby House, rue Claude Decaen, 75012 Paris, France."

Michel Ledet (SAFCH #602), 39 rue Aristide Briand, 62200 Boulogne/Mer, France.

"May I call your attention to an article in LE FANS DE L'AVIATION #257 (April 1991) which has two pages of color photos devoted to the Do-27 in Spanish military service. This article would be very useful to anyone modeling the Huma kit in Spanish markings. FANA's address is: 15-17 Quai de l'Oise, 75019 Paris, France."

Christian Hotte (SAFCH #902), 24 rue de la Picaudiere, F-44470 Carquefou, France.

"Some very good news from the MAI front. We are back in business after several months of not being able to produce kits. The main problem stemmed from my rubber-mold-material supplier discontinuing the product. Finding a new source, setting up an account, and waiting for delivery took over six months. All kits are now back in production: Yak-11, Hound Dog, Mil Mi-1, PT-19, P-40B/C, Waco UPF-7, Quail, CW-21, and PT-26 conversion.

"Our MiG-21 decals are selling well and we are now adding the new 4 + Publishing MiG-21 book to our line. This book is 50 pages of color and b/w photos, a couple of hundred of them, covering just about every detail that one could imagine. The photos are backed up with superb plans, a cutaway, 4 drawings of Czech aircraft (almost all the aircraft in the book are Czech), and 2 pages of weapons information. Text and captions are in both Czech and English. This is heads and shoulders above anything ever produced on the MiG-21 variants.

"The MiG book sells for \$12.00 postpaid. The MiG-21 decals are \$5.00. Modelers purchasing both on the same order can do it for \$15.00.

"Please contact MAI for prices on all of our kits. We are currently setting up a new price structure with lower prices on most kits. Our Rumpel C-IV and Payan Pa-22 masters are ready and we are looking at the possibility of doing these in injection-molded form. The Ryan Brougham is still in the works, as is the Ki-100 dual kit and the PT-23, which

may be a conversion kit rather than a full kit."

Tom Young (SAFCH #56), PO Box 159, Olema, CA 94950.

"Before we left for Saudi Arabia, I supplied our S-2 with the information on the Iraqi AF that had been published in SAFO #56. WE didn't see any Iraqi aircraft, but at least we knew what to look for. This shows how important are the so-called "open sources".

"I strongly support Dan Hagedorn's views as expressed in his Guest Editorial. WE must let publishers (and manufacturers) know that there is a market out there. So, we must support all SAFCH projects."

Santiago A. Flores (SAFCH #588), PO Box 430910, San Ysidro, CA 92143-0910.

"The first two-seat AMX attack jet manufactured by Embraer, bearing Brazilian military serial A-1 5650, today made its maiden flight from the company's facilities in Sao Jose dos Campos, Brazil. Crew for the flight were chief test pilot Gilberto Pedrosa Schittini, in the back seat, and assistant test pilot Luiz Alberto Guimaraes Madureira, in the front seat.

"During the flight all systems were checked as to functionality and the aircraft reached a speed of 870 km/hr, an altitude of 6,100 m, and also performed five 'touch and go's'. Following the flight, Schittini said, 'The two-seat AMX handles much like its single-seat counterpart.' He added 'It is very easy to fly from the rear cockpit, which provides excellent visibility through the wide canopy, and shall present no difficulties for pilots flying it from the back office.'

"The two-seat AMX has the same dimensions as the single-seater. This includes a length of 13.23 m, a height of 4.55 m, and a span with wingtip missiles of 9.97 m. The aircraft is powered by a single un-reheated Rolls-Royce RB168-807 turbofan engine of 5,000 kg thrust, can carry a warload of 3,800 kg, and fly at speeds of over 1,047 km/hr. The two-seat AMX retains the same operational capabilities of the single-seater and will be used for conversion training as well as for specialized missions such as patrolling, reconnaissance, and antiship.

The Brazilian Air force has an initial requirement for 79 AMX's. Of these, 65 will be single-seaters and 14 two-seaters. Nine aircraft are operational with the Brazilian Air Force at present with two more currently going through production test flying in preparation for delivery.

The first two-seat AMX flew for the first time from the Alcania's Turin-Caselle facilities on 14 March 1990. Altogether the air forces of Brazil and Italy have a joint requirement for over 300 AMX's."

Embraer Press Release, 14 August 1991.

"Regarding the RNZAF presence in the Gulf, most reports I have seen in various aviation magazines imply that only two RNZAF C-130H transports were involved. In fact, four aircraft served in the region on rotation. NZ7001 and 02 left NZ on 20 December 1990 and arrived in Riyadh on the 23rd. Hercules NZ7003 left Whenuapai on 16 January 1991 with the 1st Army Medical Team; this aircraft replaced 02 which returned to NZ at the beginning of February. NZ7004 then replaced 01 which returned to NZ on 8 March, bringing with it the first batch of returning NZ service men. NZ7003 and 04 returned home on 12 April 1991, accompanied by an RAF Hercules C.3 and a Tristar, carrying equipment and personnel. On 12 April,

NZ7005 left for Turkey carrying supplies for the refugees there, followed by Boeing 727 NZ7272 for Iran on the 13th. The aircraft returned on 23 and 20 respectively.

"The North and South Islands of NZ are normally linked by Railways-operated ferries across Cook Strait, however, a strike by seamen from 10 to 19 April 1991 cut this service link. On 16 April, it was decided to use RNZAF transports to carry passengers and cars across the Strait, as the airlines lack suitable vehicle-carrying aircraft. Air Force planes have been used during such strikes several times before, under the code name Operation Pluto. Three Andover C.1's of 42 Squadron began flying between Wellington and Woodbourne, near Blenheim, at 1800 on 16 April. Each aircraft could carry two cars. Another Andover and a 40 Squadron Hercules joined the next day. NZ7626 was used only for the first two days, as it suffered a collapsed nosewheel on the 17th, and was replaced by another Andover. From film of this aircraft on the TV news, there appeared to be very little damage, even around the nose. In all, the five Andovers (NZ7620, 21, 23, 26, and 27) made a total of 140 flights; and the lone Hercules (NZ7003) 20 flights. They carried 833 passengers and 341 vehicles in four days.

"The Andover serving with the UN Iran-Iraq Military Observers Group returned to NZ in January 1991. This aircraft has served with the UN since September 1988, but in 1990 the UN decided that it was too large and expensive to operate and that it would not be required after the end of September 1990, although this was later extended to the end of December. NZ7629 was the original aircraft, and the one that returned in January, but NZ7627 also carried the all white color scheme with black markings. Did they rotate for maintenance? At least one of these aircraft later appeared in standard RNZAF markings, but still in the all white scheme.

"The three Cessna Golden Eagles (NZ7941-43) of 104 Flight, which disbanded at Woodbourne in December 1990, have now been sold to an American company.

"The first three MB-339C trainers were delivered to NZ by airfreighter in mid-March 1991. They were assembled and test flown at Ohakea before being officially handed over on 19 April. This is just as well, as the Strikemasters were grounded yet again on 19 July when more fatigue cracks were found in the wing/fuselage join area. Nine were cleared to resume flying on 22 July. Of the other five, three can be repaired fairly easily, and should be back in the air in September, but the other two require much more work and may not be repaired at all. One Strikemaster had already been retired in 1990 when it reached the end of its fatigue life, while the remainder have all had restrictions placed on them to allow them to keep flying until they can be replaced by the MB-339.

"2 Squadron's Skyhawks are now based at Nowra in

Australia where their roll is to provide training for the RAN by acting as enemy aircraft during exercises. Some of these aircraft are actually ex-RAN and will be doing the same job they did before the Australian government killed off the fixed-wing Fleet Air Arm in 1982. The Skyhawks were flown to Whilliantown by 75 Squadron pilots for the Tasman exercise in February 1991, then moved to Nowra where they will stay for five years. They will also continue to provide Skyhawk-conversion training for the RNZAF. Strength is six aircraft, four single-seaters and two trainers, and 53 personnel. This leaves 15 Skyhawks at Ohakea with 75 Squadron.

"The budget, announced on 30 July 1991, was all bad news for the services. The Defence budget, capped at \$1.4b (NZ) since 1989/90, will be cut 30% by 1994. About a thousand military and civilian staff are to be cut by 1994. Several bases are to close, including the Te Rapa stores depot at Hamilton, and the Army base at Papakura (by the end of 1992) which means that the SAS will move to Hobsonville.

"The major change for the RNZAF is that Wigram airfield will close within three years, and flying training will move elsewhere, but where has not yet been decided, even though \$4.7m has just been spent on runway upgrading. The base is to remain open for ground training. It is not yet known what will happen to the four UH-1H Iroquois helicopters providing SAR coverage for the South Island.

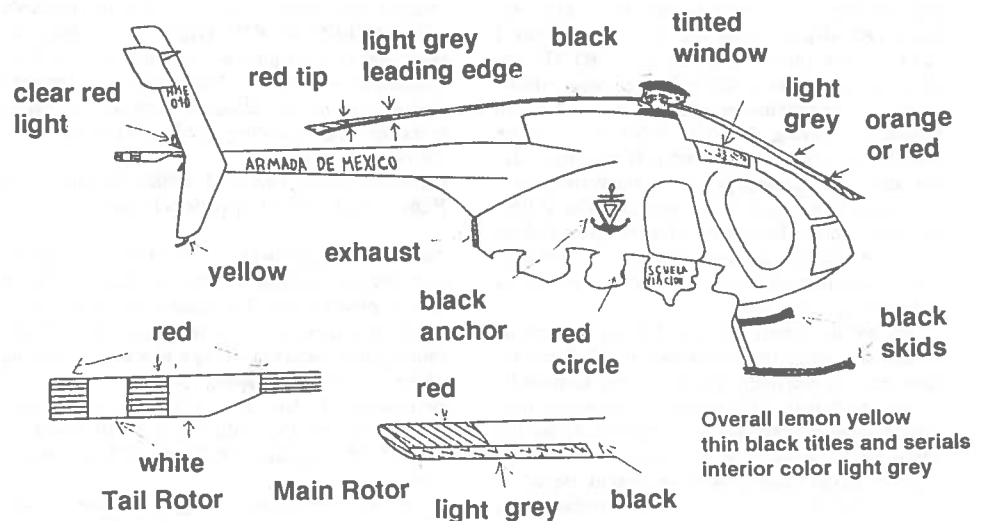
a European-One style of green, green, and grey with low-vis red/blue markings. On the Iroquois fleet, some aircraft have a mix of the two styles, with the fuselage and tail boom not matching - most interesting.

"Regarding the Mexican Navy MD-500E helicopter in SAFO #57. A color photo of this particular machine HME010 appeared in the May 1991 issue of the reborn AIR PICTORIAL. The overall color is closer to a lemon yellow than trainer yellow, the landing skids are indeed black, but the legs which attach them to the fuselage are the same yellow as the rest of the aircraft. The rotor blades are matt black, with either red or very deep orange tips, the leading edge of the blade is light grey. The tail rotor is white, with two red bands, and a clear red light on a small shelf projecting behind the T-tail. The anchor emblem on the fuselage is black, the lower line being rather flatter than shown in the drawing. The enclosed drawing is traced directly from the AP photo."

Paul Adams (SAFCH #773), 81 Ponsonby Road, Ponsonby, Auckland 1, New Zealand.

"IPMS-ECUADOR was established four years ago with an initial group of some ten members. We are now over 100 and so far we have had five modeling competitions and many exhibitions, particularly on the Ecuadorian Air Force open days. We have a short newsletter with techniques and advice of common interest. It's printed in Spanish, but, if anybody

MEXICAN NAVY MD-500E

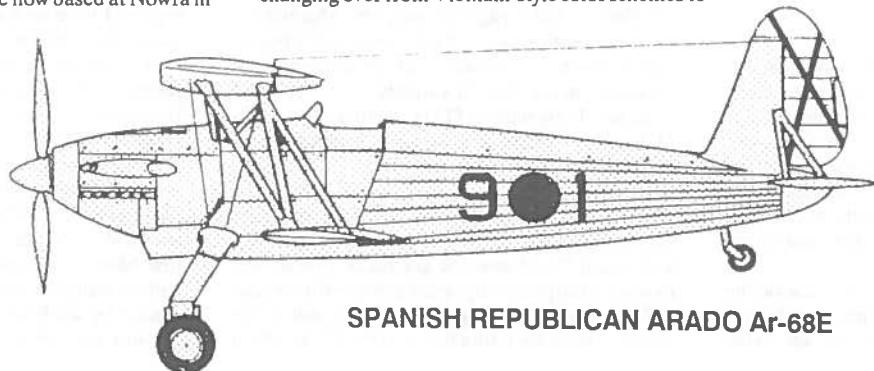


For flying training, one possibility is a joint training scheme with Australia which is again under study despite having been rejected before.

"The Andover and Iroquois have both been slowly changing over from Vietnam-style color schemes to

is interested, we can mail an issue on request."

Alfonso Benites, Director of Foreign Liaison, IPMS-Ecuador, PO Box 09-01-9901, Guayaquil, Ecuador.



SPANISH REPUBLICAN ARADO Ar-68E

ARADO Ar-68, 1/72-scale, injection-molded kit, Huma-Modell, Kilianstadter Str. 9, D-645 Hanau 6, Germany. DM 24.00.

Now that Matchbox is no longer with us, there is no longer any question that The most exciting injection-molded kits come for a small company in Germany: Huma-Modell. Consider their latest two releases: the Ar-68, the Luftwaffe's last biplane fighter, and the FW-Triebflügel rotary-wing project. These kits are unsurpassed in imagination and execution.

The kit of the Arado Ar-68 biplane consists of 45 parts molded in two white-plastic, sprues along with two clear-plastic parts. The molding is flash-free and crisp with subtle wing-rib detailing and delicately inscribed panel lines on the metal panels. However, some purists may find the fuselage fabric a bit overdone. Alternate parts are provided for three versions; the BMW powered Ar-68A/D/F, the Jumo powered -68B/C/E, and the radial-engined -68H. The choice of spatted or unspatted wheels is also offered.

The engineering in the kit is exceptional, the best I've seen in 1/72 scale since those much-beloved Monogram biplanes. The lower wing is molded in one piece with the fuselage halves being inserted from both sides, thereby insuring the correct dihedral. Best of all, the landing gear is in one piece, to be inserted before the nose is added to the fuselage, simplify those dreaded alignment problems. Holes are provided in the wings and fuselage for rigging; not those dreadful pits that Heller used, but holes just big enough for your finest nylon fishing leader.

The large, well-printed decal sheets provided markings for 6 aircraft, including one in Spanish Civil War markings. The 6-page instruction sheets provides a history in three languages (German, English, & French) clear and uncluttered construction diagrams, and drawings for all the aircraft featured on the decal sheet.

Without a doubt, the Huma kit of the Ar-68 is one of the finest biplane kits produced by any of the "limited-run" manufacturers.

FOCKE WULF TRIEBFLUGEL, 1/72-scale, injection-molded kit, Huma-Modell, Kilianstadter Str. 9, D-645 Hanau 6, Germany. DM 24.00.

Another excellent kit from Huma-Modell, but this time the prototype is an unbuilt project that gives a new meaning to "rotary wing" aircraft. The aircraft was to be a tail-seater, with three wings (no, its not a triplane, but just think of the fun you'll have entering it into an "all-triplane" contest)) which, driven by ramjets at the tips, rotated about the longitudinal axis of the fuselage. If this description conjures up an image of a fantastic aircraft, its accurate.

The 39 parts of this kit are beautifully molded on two flash-free sprues of white plastic with finely-inscribed panel lines. The break-down of parts is well engineered and construction should be straightforward. The decals sheet is minimal consisting of 4 white outlines for crosses and 4 white outlined swastikas. Where 4 swastikas go on 4 fins is a mystery unexplained on the otherwise excellent 4-page instruction sheet.

A tail-seater with wings extending in every direction is going to be a lot more difficult to pack for the next display of contest than a mundane helicopter. However, if you do not glue the forward fuselage to the rear fuselage, you will be able to remove the wings and store them flat.

If you would like to build a model of something

really bizarre and will not mind all the questions you'll get when you display it, then this is the kit for you.

CURTISS P-40B/C TOMAHAWK, 1/72-scale cast-resin kit. Model-Aire International, PO Box 159, Olema, CA 94950.

I've never been much of a fan of resin kits, but this kit has made me reconsider my position. This kit consists of two major parts (fuselage and wings in one casting and vertical and horizontal fins as another) and a "pancake" of small parts. A clear, vacuformed canopy is also included.

The sides of the cockpit are open down to the floor, so you can detail the "office" to your heart's desire and then epoxy on the sides which are furnished on the "pancake". There is quite a bit of flash to clean up along the parting line of the mold, but this has been engineered to occur where removal will do the least damage to the surface detail. The inscribed surface detail is superb, superior to many injection-molded kits, and not an air bubble is in sight. The degree of under-cutting achievable by the process is amazing; deep, well-delineated wheel wells and air intakes with interior detail. Small parts consists of excellent propeller, drop tank, seat, wheels, and exhaust stacks. The landing-gear struts and the control column look as if they will take a lot of work to get off the "pancake" in one piece, but who am I to say since I've never had any experience in this type of modeling.

The instruction sheet includes construction details, a small exploded view, and great 4-view, 1/72-scale drawings. The box top features a drawing of a Flying Tiger P-40C in action, and the box bottom has two profiles of USAAF aircraft. No decals are included, but several Micro Scale sheets covering this aircraft type should still be available.

It is a legitimate question to ask why do we need another kit of the P-40B/C, and a resin one at that. Let the instruction sheet address this question: "While other 1/72 scale kits of the early P-40 have been produced over the years, we have attempted to provide a model that offer the correct nose and rear fuselage contours that have been so difficult to capture." Just by placing the two major parts together, I can see that this kit looks "right"!

If you would like to add an accurate Tomahawk to your collection, you should give careful consideration to obtaining the MAI kit of the P-40B/C. On the other hand, if you've been thinking about trying a resin-cast kit, but have been afraid, this kit would make a good introduction to the field.

POLIKARPOV I-16 TYPE 10, 1/48-scale, injection molded kit, Hobbycraft Canada.

This long-awaited kit comes with attractive and accurate box art depicting a Spanish Republican I-16 in flight. The kit itself consists of 35 parts molded in light-grey styrene and two transparencies. The molding is crisp, without flash, and meets the high standard set by other recent Hobbycraft releases. The panel and control surface lines are finely engraved and wing and tail surface ribbing are correctly raised. Using Miranda and Mercado's "World Aviation in Spain, Vol. 1" as a guide, I examined the wing panels and overall proportions of this kit and found it to be an accurate representation of an I-16 Type 10.

Building the kit is simple and straightforward, as befits a rugged plane like the I-16, and the instructions are rudimentary but clear. The cockpit, though sparse, contains a detailed and accurate instrument panel. However, the reflex collimator

gunsight is missing and the "W"-shaped control stick is inaccurate. I-16 Type 10s had a narrow, square-off, delta-shaped control ring containing four rectangular firing buttons stacked in pairs. The landing gear wells are recessed, but do not accurately represent those found on the real aircraft. Two types of canopies are included in the kit: the enclosed, sliding version used on earlier Type 5 and 6, and the open cockpit windscreen used on the Type 10. Since conversion of this kit to a Type 5 or 6 would require extensive re-working of the outer wing panels, I am puzzled why Hobbycraft would include the earlier enclosed canopy. Perhaps this is a sign that earlier versions of the I-16 may be released in the future.

Hobbycraft provided color schemes and decals for two Spanish I-16s: the Republican fighter depicted in the box art and a post-civil war Nationalist version. The color schemes are more or less accurate for both version, but listing FS595a equivalents was a bit unnecessary given the speculative nature of Spanish Civil War paint colors.

No historical information was included for these aircraft. Consultation of Miranda and Mercado's book revealed that the Republican fighter, CM-177, was an I-16 Type 10 operating with the 4th "Mosca" Squadron at Los Monjos in 1938. This aircraft was part of the first shipment of Type 10s sent overland through France to Spain in March 1938. The white spinner on CM-177 denoted a "Cold Nose" Type 10; a field conversion with an uprated Wright Cyclone engine and oxygen for use at high altitude. The Nationalist machine, 1W-6, was an I-16 of Group 1-W, Moron Fighter Base, 1940-41.

The decals are unfortunately of poor quality. The "Popeye" insignia of the 4th "Mosca:" is off register and must be corrected by painting after application. The Nationalist black fuselage circle contains a Falangist yoke-and-arrows symbol which is not carried on Miranda and Mercado's illustration of this plane. Still, most of the decals are in-register and are an improvement over earlier Hobbycraft efforts. The worst deficiency is the lettering. Both Republican and Nationalist aircraft codes had a distinctive lettering style which is not captured by the kit decals. Unless the modeler opts to wait for after-market decals to appear, the only alternative is to hand-paint the correct lettering style.

Decals problems aside, Hobbycraft has produced a very good kit of an important aircraft so far neglected by the major kit manufacturers. Hobbycraft appears to be slowly improving the quality of their kits and the positive elements of this model far outweigh the negative ones. I recommend this kit to any Spanish Civil War buff or enthusiast of the small air forces.

John Tate (SAFCH #1005), 3623 Grande Ave.,
Oakland, CA 94610.

POLIKARPOV Po-2. 1/72-scale injection-molded kit, unknown Russian firm.

The box art is the same as for the KP box, but this is definitely not the KP kit. This is a new molding that differs from the KP kit significantly in that it incorporates parts to make up to four or more variants. You can build either the standard light-bomber/reconnaissance, the VIP transport, the ambulance, or float-plane version. There are also some skis for further variations.

The Polikarpov Po-2 was developed by the Soviets in the late 1920s as a trainer, but the basic design proved so adaptable that it eventually appeared in

at least 30 variants. It was used extensively in both WWII and in the Korean conflict, and was in production as late as 1954 in Poland. NATO's code name was, rather appropriately, MULE. Our GIs in Korea had various names for it, but the only printable one was "Bed Check Charlie".

The kit has four sprues of fairly flash-free, light grey plastic with crisp raised details. There are three clear parts: two windscreens (both were broken and one was only half formed in my kit) and a large canopy which mates with the hull extension for the VIP version. This canopy is a bit thick, but clear and it should be serviceable. The decals are for Soviet yellow "11" (same as the KP kit), and Polish VIP transport yellow "1". The register is very poor with lots of color bleed; they look almost as if they were done by hand. Obviously they're not useable, but then who uses kit decals anyway? Directions are in Russian but include fairly comprehensive drawings. With the exception of the decals, I consider this an excellent kit that can be built right out of the box. The super detailer would probably do something with the engine and interior. The small air force enthusiast will want a number of these kits as it was used by everybody and his uncle in the eastern block. I've come up with photos of Czech, Polish, and North Korean aircraft. I'd sure like to see an Afghan or Albanian example. Anybody out there who can help?

Rick Webber (SAFCH #923), 6923 Arboreal, Dallas, TX 75231.

SPITFIRE Mk IX UTI, 1/72-scale injection-molded kit by Farmtex Poland.

This is the first two-seat Spitfire I've come across as a complete, as opposed to conversion, kit. It will be a welcome addition to my collection as it is an excellent small air force subject. The kit is rather rough and it looks like it will take a lot of work to make a decent model. The kit consists of some 22 small parts on one sprue, four wing panels on a second sprue, two separate fuselage halves, and two clear canopies. The white plastic is rather brittle and discolored in places. The clear parts are thick and a bit rough in texture. They will require polishing or replacing. Surface detail is generally recessed with some panels having raised edges. All the small parts are pretty poor, so I expect to be raiding the parts box fairly heavily. The fuselage and wings look OK.

The instructions are in Polish and include a FROG-type exploded view. Decals are fine, but all you get are 8 Soviet stars. The box is moderately sturdy and has a color drawing on the back with painting instructions in very poor English.

Almost everybody that used the Spitfire IX to any extent had some two-seaters around. I've identified the following as users of this versions: Belgium, Israel, Holland, Italy, USSR, France, Egypt, Greece, Czechoslovakia, Denmark, South Africa, Turkey, Norway, Yugoslavia, Burma, Argentina, Ireland, India, and Iraq, but I've only been able to find photos of the Indian and Russian examples. A great SAFO article could be done on this subject. Anyone out there interested?

Rick Webber (SAFCH #923), 6923 Arboreal, Dallas, TX 75231.

"For those interested in card models an excellent new series by DESIGN is available from Poland. These have to be seen to be believed! The MiG-29 (1/32 scale) has 140 pieces printed on hard card stock. Details include landing gear, missiles, full cockpit, and sensor ball as well as aerials in crisp and reasonably accurate color. The kit also included a decal sheet which features a raft of representative small stencilling as well as the national insignia (Soviet), nose numbers, and MiG logo. The text includes color photos of various airframes and markings detail - just beautiful! DESIGN kits should be available from your Polish correspondent."

Jim Lyzun (SAFCH #920), RR #5 Thunder Bay, Ontario, Canada P7C 5M9.

Squadron Mail Order is now carrying the excellent MPM kits from Czechoslovakia at very reasonable prices. Their September Supplement lists the following: 1/72-scale injection-molded Zlin C.106/Bu-181 \$7.95, Mi-1 \$7.95, & La-9/11 \$10.95; 1/48-scale injection-molded Aero C.104/Bu-131 \$10.95; 1/72-scale vacuform kits KOR.1 \$7.95, Polikarpov R-5 \$7.95, Sukhoi Su-9 \$7.95, & Sukhoi Su-5 \$7.95; and 1/48-scale vacuform kits Avia AV-135 \$7.95, Avia B-534-1 \$7.95, Avia B-534-IV \$7.95, Polikarpov I-16 \$7.95, Polikarpov I-15 \$7.95, & Polikarpov I-153 \$7.95. Their address is: 1115 Crowley Dr., Carrollton, TX 75011-5010.

AEROSPATIALE GAZELLE

Planned in 1964 by Sud Aviation as an Alouette III successor, the Gazelle was intended to provide a faster, more maneuverable light helicopter for military operators. Combining glass-fiber rigid rotor technology developed in conjunction with Bolkow of West Germany, and built jointly with Westland in the UK, the Aerospatiale Gazelle is truly an international venture. Sleek and elegant in appearance, and successful in the world market, today's SA 342 belies the considerable teething problems which beset the type's early days. In addition to the rigid rotor system, the Gazelle was to take advantage of a featherable "fenestron" enclosed tail "fan" (which was to be shut down in forward flight, allowing all power to be transferred to the main rotor), a T-tail, and a more powerful Turbomeca engine.

When the first production SA 341 finally appeared in 1971, compromises dictated by flight trials resulted in a semi-articulated main rotor head with a full-time fenestron, tail-boom mounted elevators with endplate fins, and an Astazou III engine of similar power to the Alouette. Another year passed before severe vibration problems were rectified, and even then early production examples had their share of additional troubles. The definitive SA 341 is powered by a 590-shp Turbomeca Astazou IIIA, and is essentially an Alouette II upgrade, with a totally enclosed fuselage structure and five-seat

cabin. It has been delivered in various civil and military versions, which differ mainly in equipment fit. An improved fenestron and a change to the 858-shp Astazou XIVH in 1977 resulted in the SA342. Military versions can carry the Euro-missile HOT anti-tank missile or GIAT 20-mm cannon on outrigger pylons, as well as other weapons. Although it has been criticized as insufficiently robust for survival in the battlefield environment, over 1000 military Gazelles have been sold. The French Army (ALAT) and the British armed forces (AAC, RN & RAF) are, as to be expected, the largest Gazelle users. At least 17 other countries have purchased military Gazelles. Yugoslavia (the first foreign customer) and Egypt produce and/or assemble Gazelles under license at Soko and Helwan respectively. Iraq, Kuwait, Morocco and Syria are among the larger users of SA341/342s, while Abu Dhabi, Burundi, Cameroon, Chad, Guinea, Ireland, Kenya, Qatar, Rwanda, and Senegambia all operate a few; Trinidad and Tobago reportedly has a single example.

At least three plastic model kits of the Gazelle can be found. Heller has one in 1/50 scale and another in 1/100, while Airfix offers theirs in 1/72. The most recent release of the 1/50 scale kit features a HOT-armed SA 342L of the ALAT, with upturned exhaust and FM aerials. I have not examined this kit, but it seems to result in an accurate Gazelle. It is an

older molding, though, and probably could use some additional detail. The 1/100 version, in Heller's unpredictable Cadet range, is not to be overlooked. Most recently issued in red/white RAF trainer markings, the kit can also be found in the orange-trimmed civil colors of the SA 341 Aerospatiale demonstrator. Although simple, this kit is one of the best in the Cadet series and it builds up nicely. The fuselage front halves are molded in rather thick clear plastic, but when assembled and painted the model is very appealing. The Airfix 1/72 kit is a cleanly-pressed model with fair interior and rotor-head detail. The transmission fairing is oversimplified, and no armament is provided, but the clear parts are nicely cast and surface detail is very petite. The 1/72 builder will not be disappointed with this kit, except for the dull British Army color scheme.

The Gazelle is an attractive aircraft from any point of view, and is worthy of further study. I have included an excellent 5-view drawing by Hubert Cance to inspire you all to dive into your files on the Gazelle and join our Aerospatiale Research Project.

Bill Devins (SAFCH #557), 107 Troy Hills Rd, Whippany NJ 07981 USA.

Country	Service	Type
Abu Dhabi	Air Force	SA.341 (?)
Burundi	Air Arm	SA.341 (?)
Cameroon	Air Force	SA.341 (?)
Chad	Air Force	SA.341 (?)
Egypt	Air Force	SA342L
France	Army	SA.341F, M, 342M
	Civil	SA.341G, 342J

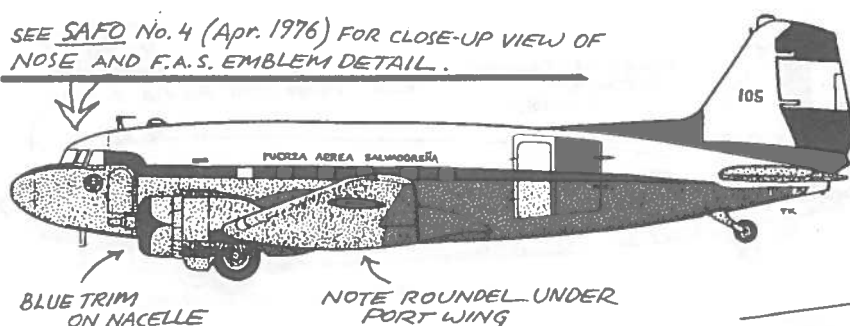
Great Britain	Air Force	SA.341D, E
	Army	SA.341B
	Navy	SA.341C
Guinea	Air Force	SA.341 (?)
Iraq	Air Force	SA.342L
Ireland	Army Air	SA.342L
Kenya	Air Force	SA.341 (?)
Kuwait	Air Force	SA.342K, L

Morocco	Police	SA.342K, L
Qatar	Police	SA.341 (?)
Rwanda	Air Force	SA.341 (?)
Senegambia	Air Force	SA.341 (?)
Syria	Air Force	SA.342L
Trinidad/Tobago	Air Force	SA.341 (?)
United States	Civil	SA.341G
Yugoslavia	Air Force	SA.341H, 342L

OVER CENTRAL AMERICA:

EL SALVADOR

SEE SAFO No. 4 (Apr. 1976) FOR CLOSE-UP VIEW OF NOSE AND F.A.S. EMBLEM DETAIL.

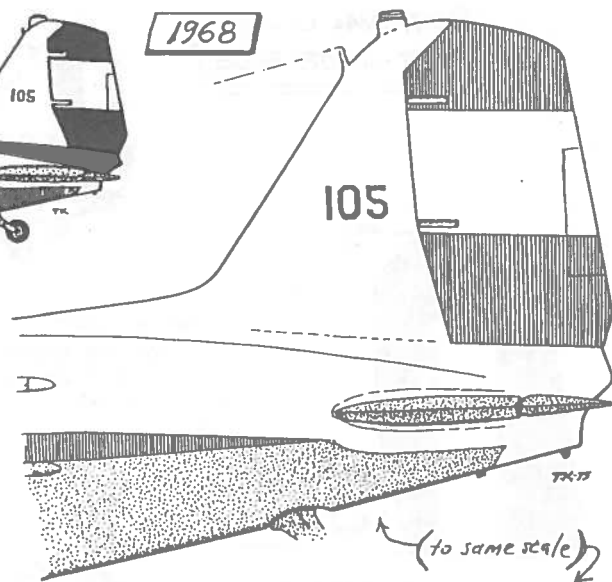


BLUE TRIM ON NACELLE

NOTE ROUND EL UNDER PORT WING

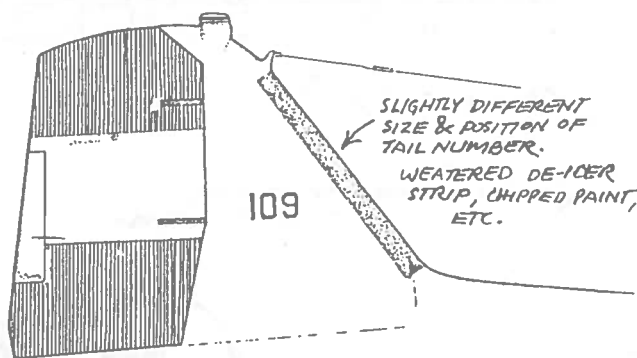
[NATIONAL COLORS: BLUE-WHITE-BLUE]

1968



(to same scale)

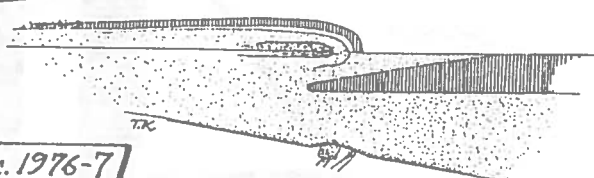
FUEZA AEREA SALVA



SLIGHTLY DIFFERENT SIZE & POSITION OF TAIL NUMBER.

WEATHERED DE-ICER STRIP, CHIPPED PAINT, ETC.

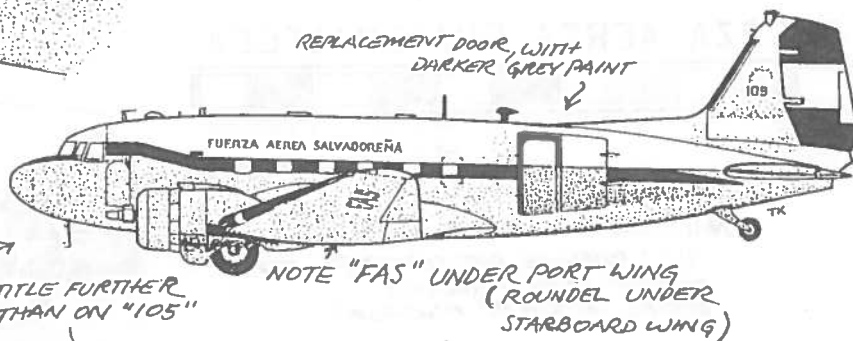
109



DIFFERENT DETAIL OF FUSELAGE TRIM, BOTH FRONT AND REAR, AS WELL AS PROPORTIONS OF RUDDER STRIPES.

c. 1976-7

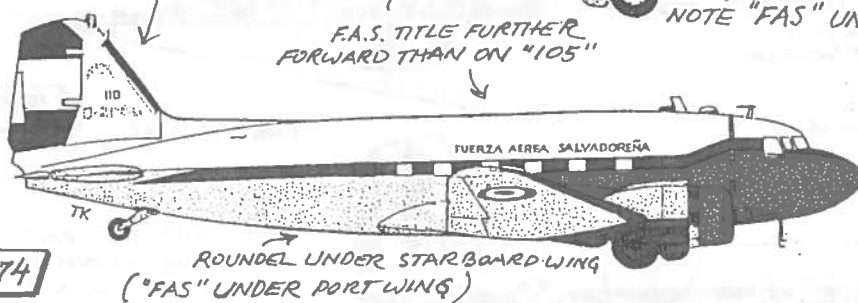
ON BOTH "109" AND "110" SMALLER PROFILES, TRACES OF PREVIOUS [USAF?] MARKINGS & NUMBERS, REMOVED OR OVERPAINTED.



REPLACEMENT DOOR, WITH DARKER GREY PAINT

F.A.S. TITLE FURTHER FORWARD THAN ON "105"

NOTE "FAS" UNDER PORT WING (ROUND EL UNDER STARBOARD WING)



1974

ROUND EL UNDER STARBOARD WING ("FAS" UNDER PORT WING)

NOTE: DIFFERENT ANTENNAE, BLACK AREAS UNDER NACELLES, WINGS, FORWARD FUSELAGE, & PROP-WARNING STRIPES, ON ALL THREE MACHINES.

[MORE NOTATIONS IN "TAILS," PT. 4]

* Project begun in 1974 (this portion in 1975) and announced in SAFO, April 1976 [see above]. First part (SULTAN OF OMAN'S AIR FORCE) appeared in SAFO, April 1980, as extension of "SAFO MISCELLANY, Part III."

TED KOPPEL/SAFO

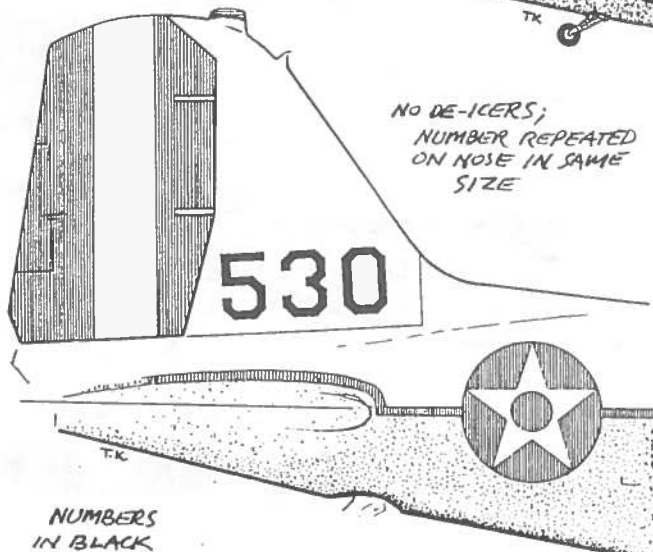
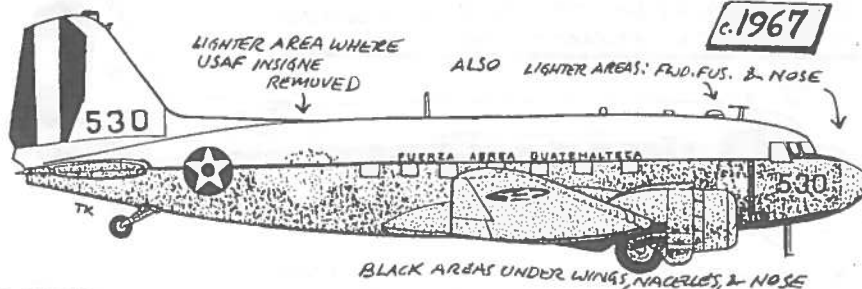
UNFINISHED PROJECTS FILE

TAILS of the GOONEY-BIRD (3)

OVER CENTRAL AMERICA:

GUATEMALA - I.

[NATIONAL COLORS;
BLUE-WHITE-BLUE]



(to same scale)

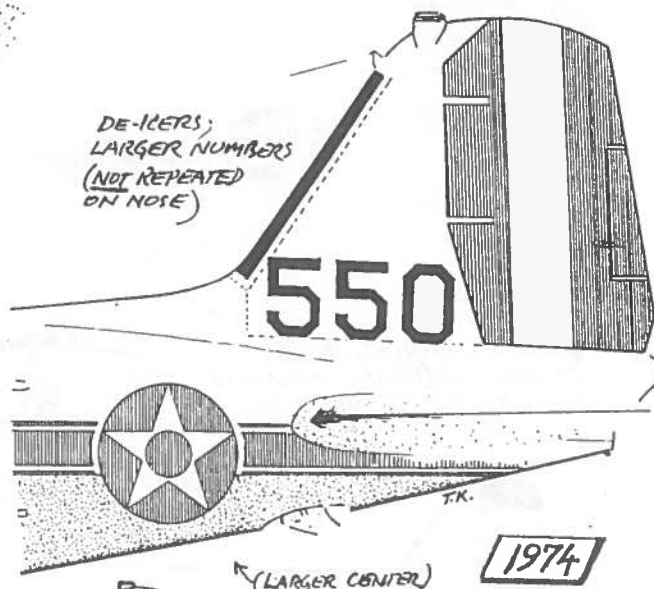
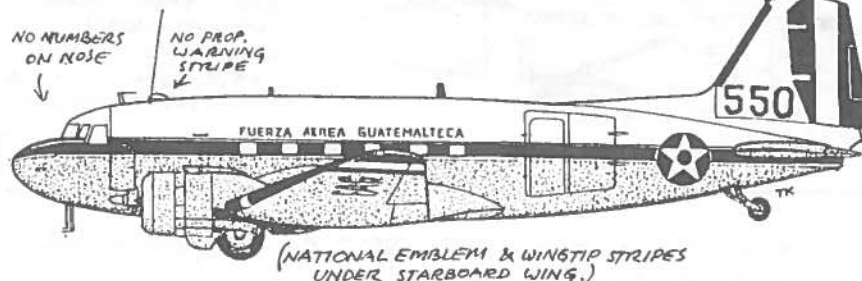
← NATIONAL EMBLEM CENTERED ON REAR FUSELAGE.



(to same scale)

NATIONAL EMBLEM LOW ON REAR FUSELAGE, BUT CENTERED ON WIDE TRIM (RUNNING ENTIRE LENGTH OF FUSELAGE) →

[NOTE DIFFERENCES IN ANTENNAE]



NOTE:

NOT CLEAR IF "FAG" UNDER PORT WING ON THIS AIRCRAFT (SHADOW TOO DARK MY PHOTO), BUT BLUE-WHITE-BLUE STRIPES CARRIED ON WINGTIPS (AS ON HONDURAN AIRCRAFT).

TED KOPPEL/SAFO **CONTINUED** →

UNFINISHED PROJECTS FILE

TAILS of the GOONEY-BIRD (4)

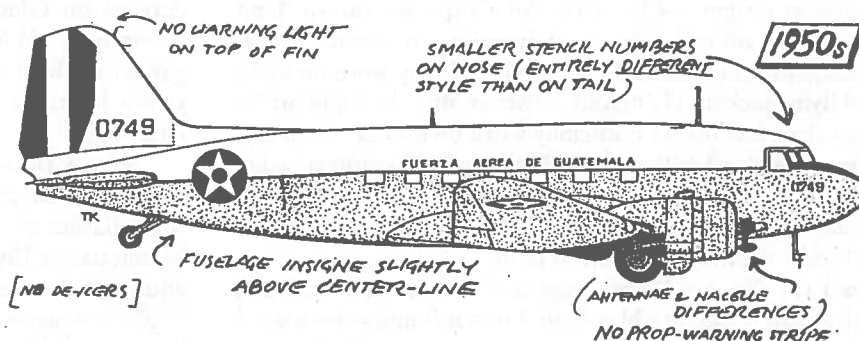
OVER CENTRAL AMERICA:

GUATEMALA-II.

[DE-TAIL VIEW, WITH
NUMBERS, NOT COMPLETED]

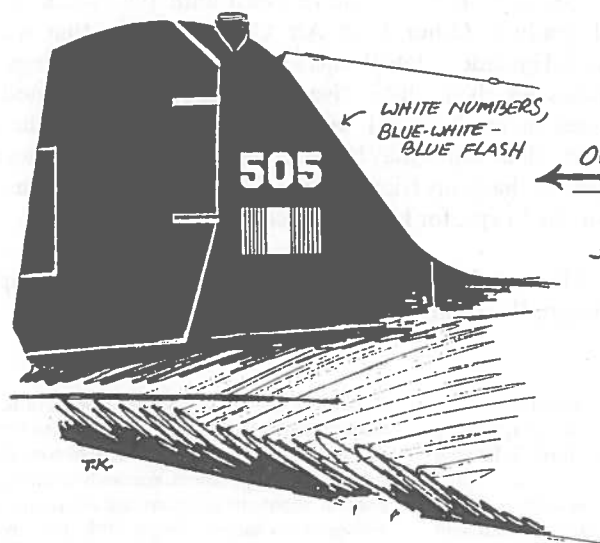
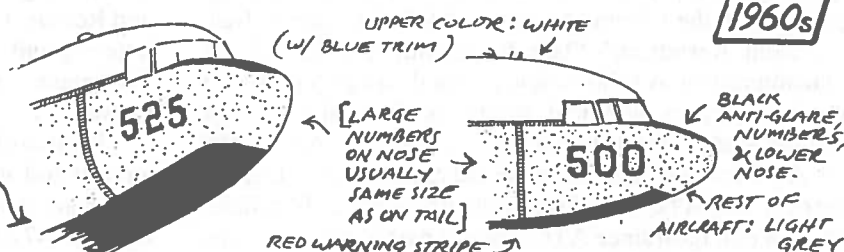
NOTE A.F. TITLE ON FUSELAGE:

C-47s entered service with the "Cuerpo de Aeronautica Militar" during WWII. After the war, the force became "Fuerza Aérea de Guatemala," before current designation of "Fuerza Aérea Guatemalteca" was instituted.



SAME SCHEME AS "530"
[IN "TAILS," PT. 3], WITH "FUERZA
AEREA GUATEMALTECA" ON
THE FUSELAGE:

DARK AREA UNDER NOSE
EXTENDED FURTHER FORWARD (THAN,
FOR EXAMPLE, ON "FAS" AIRCRAFT
ILLUSTRATED IN "TAILS," PT. 2)

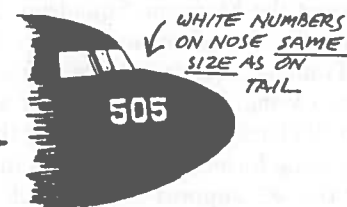


OVERALL SCHEME: OLIVE DRAB

NO FUSELAGE EMBLEM
(OR TITLE), BUT STANDARD
SIZE INSIGNE UNDER
STARBOARD WING, AS
BEFORE. (UNDER-
SURFACES ALSO OLIVE
DRAB.)

[OTHER
AIRCRAFT
IN THIS
FINISH]

(ALSO "500")



540
535

SIZE AND
STYLE OF
OTHER
WHITE
NUMBERS
SAME AS
ON "505"
BOTH NOSE
AND TAIL

EL SALVADOR [see "TAILS," PT. 2], 1990 POSTSCRIPT:

The four C-47s received by the FUERZA AEREA SALVADOREÑA in the late 1940s have grown to 18 aircraft, although sources differ on the number destroyed during the El Salvador-Honduras "Soccer War" of July 1969 [resulting in purchase of 12 additional C-47s] or during the FMLN guerrilla attack on Ilopango Air Base in January 1982 [leading to acquisition of 14(?) more of the type]. In the mid-1970s the total reportedly was 16, then down to 13 by the early 1980s (a/c nos. "101," "103-114"). More recently, roughly half-dozen AC-47 gunship versions have entered FAS/FAES service (including a/c nos. "116," "118," "119," "125"), in a subdued color scheme of dark grey. [One AC-47 was downed by an FMLN surface-to-air missile in early December 1990.]

TED KOPPEL/SAFO

IRISH AIR CORPS INSIGNIA

Michael Sullivan

The Air Arm of the Irish Defense Forces mirrors the country it serves; small yet colorful and rich in history. All current unit and squadron insignia of the Irish Air Corps are shown. Unit flashes are the official, approved insignia for service dress, whereas Squadron flashes are unofficial and only worn on flight suits and flying jackets. (I am told, however, that the Light Strike Squadron flash has been unofficially worn on service dress and the uniform sweater.) Although the Light Strike Squadron badge was carried on some Seafires, Hurricanes, Lysanders and Vampires, none of the following squadron or unit insignia appear on aircraft today. Viewing from left to right:

Row 1 (a) The Air Corps insignia. The Irish three-colored boss with yellow wings on a blue field. Flash is found in both wool and twill. (b) Administration Wing. Scroll, Pen and Key (representing Administration and Quartermaster roles) on an orange background with the legend "Aerodrom Mhic Easmuinn", Irish for "Casement Aerodrom". Flash found only in twill. (c) Air Corps Headquarters. A yellow eagle perched on a grey rock with a yellow boarder on a blue field. Symbol is identical to the Air Corps collar badge. Flash found only in twill. (d) Air Traffic Control. A yellow eagle landing on an outstretched arm. Legend "Air Corps Group ATC" in red with yellow boarder on blue field. (This is not a unit flash since ATC is only a part of the Air Corps Group.) Flash found only in twill.

Row 2: (a) No. 1 Support Wing. Two red aircraft leaving yellow contrails through a white gunsight with yellow waves and a red "1" below on a blue field with a yellow boarder. (The waves represent the Maritime Squadron, the gunsight represents the Light Strike Squadron and the aircraft represent the Transport and Training Squadron.) Flash found only in twill. (b) No. 3 Support Wing. Yellow wings over a red "3" on a blue (L) and green (R) background. (Signifying the sea and land for the SAR role.) Wing formed in 1987 when the helicopter squadron outgrew the #2 support wing, which now is the Army/Guarda (police) CO-OP wing, operating Cessna 172's. Flash found only in twill. (c) Light Strike Squadron. Panther with motto "Beag ac Fiocmar", Irish for "small but fierce", on an orange background.

Panther and lettering in black with red and white details on panther's eyes and mouth. (This badge differs from the one carried on Gladiators, Hurricanes, Seafires, Lysanders and Vampires.) (d) Maritime Squadron. A white, yellow and black gannet in flight with legend "Eyes over the Sea" in white with yellow boarders. (One batch of this flash was made with black lettering).

Row 3: (a) Air Support Signal Company. A yellow stylized aircraft with a green center, taking off from a black runway with white flashes on a blue field. Patch found in wool and twill. (b) 5 Maintenance Engineers. Air Corps boss on blue field with "5" and symbol on red field. Flash found only in twill. (c) Qualified Flight Instructor. A vulture wearing a flying helmet with yellow boarders and QFI initials. (Unofficial badge worn by instructors on their flight suits.) Patch found in wool and twill. (d) Search and Rescue. Full color red, white and blue Dauphin with orange lettering and boarder on a blue background. (Used as an unofficial name tag on flight suits and flying jackets.) Flash found only in twill.

Bottom of page: Lower left: Training Wing. A spear, stylized aircraft and atoms on a blue field. The remainder of the patches shown are Apprentice class titles worn above the Training wing flash (as "47 APTCE Class" is illustrated). Apprentice class titles were started with "46 APTCE Class", which graduated in July, 1985. The flash is worn for the duration of the two year course, i.e., "53 APTCE Class" will be worn until 1992 when that class will graduate. Other Irish Air Corps insignia that were not covered include: Pilots Wings and Young Officers' Wings course patches, which are distinctive flight suit patches designed by the classes themselves and worn after completion of the pilot's course, all of which may be covered in a later article. The author wishes to thank my friend, Flight Sergeant James Perkins, of the Irish Air Corps, for his assistance

Michael Sullivan (SAFCH #990), 10705 S. Whipple St., Chicago, IL 60655.

(continued from page 108)

Defence, Air Force Office A-8-08, Russell Offices, Canberra ACT 2600, Australia. (A\$70 to US buyers, postage included).

"The Royal Australian Air Force celebrates its 70th anniversary during 1991. To commemorate this milestone, the Chief of the Air Staff in 1987 commissioned the writing of a history of the service covering the formative years, from its establishment in 1921 until 1939, thereby filling in the gap between the official histories of Australian air power in the First and Second World Wars. The outcome of this initiative is 'The Third Brother', a major historical achievement which is destined to become the definitive study of the period. 'The Third Brother' is a comprehensive account of the RAAF in the years leading to the start of the Second World War, documenting the establishment and growth of the service, its personalities and problems, low points as well as triumphs. In particular it describes the struggle of the third member of Australia's defence triad to gain accep-

tance as a co-equal of the Army and Navy.

"This multifaceted account includes chapters on the following: 1. Decision for an air force, 2. Raising the new service, 3. The fight for separate identity, 4. The Imperial connection, 5. Base infrastructure, 6. Aircraft and equipment, 7. Organization and training, 8. The Citizen Air Force, 9. Local development and production, 10. Civil aviation, 11. Safety record, 12. Problems of administration, 13. Polishing the public image, 14. Furthering national goals, 15. Transition to war; plus five appendices listing Ministers of Defence, membership of the Air Board, Defence expenditures, and RAAF personnel and aircraft numbers."

oberleutnant felpilot othmar wolfer und die CHRONIK DER KUK FLIEGERKOMPAGNIE 56; 100 pages, 36 photos, and drawings. OS389. Austrian Aircraft Historians, Pfenniggeldgasse 18/2/14, A-1160, Wien, Austria.

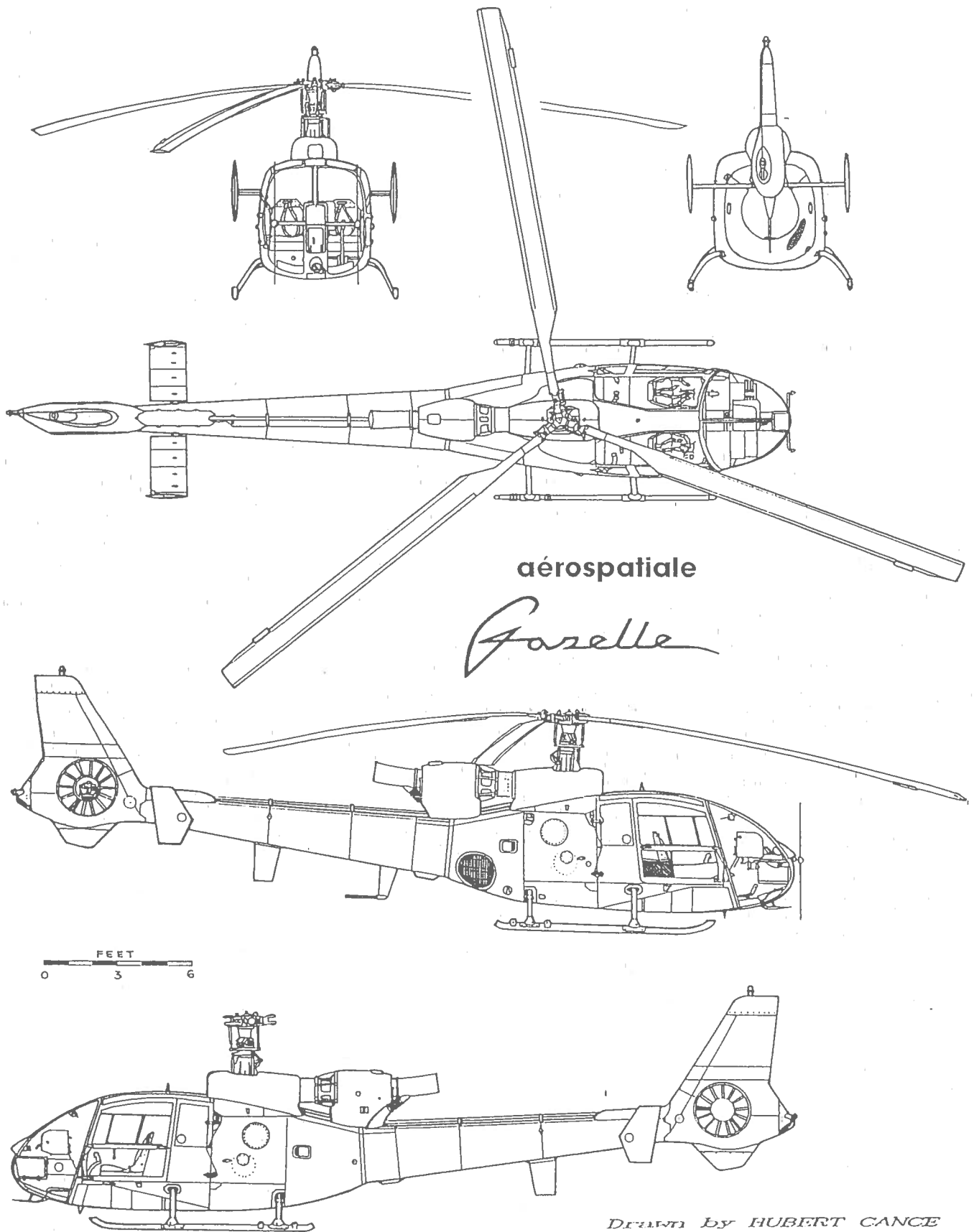
BOOK BARGAIN: CHINA TODAY: Aviation In-

dustry by Duan Zijun. A unique work of reference tracing the history of aviation in China from 1951 onwards, covering a development history of aircraft and ancillary equipment, research facilities, quality control, economic relations and international technological exchanges. 550pp Hbk. L65. Available from Midland Counties Publications, Unit 3 Maizefield, Hinckley, Leics LE10 1YF, England, for L6.95 plus postage.

BOOK BARGAIN: ASIAN AIR POWER: EXOTIC WARPLANES IN ACTION (Osprey Colour Series). A rare treat for the enthusiast, colour views of Pakistani F-16s, Malaysian Air Force PC-7s, Tiger IIs and Tiger Eye aircraft to Japan's PS-1 flying boat. 128 pages Softback. L9.99. Available from Midland Counties Publications, Unit 3 Maizefield, Hinckley, Leics LE10 1YF, England, for L3.25 plus postage.

IRISH AIR CORP EMBLEMS





Drawn by HUBERT CANCE